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PERSONAL.

Mr. T. H. Verner has been appointed Superintendent, and Mr. J. M. Kinkaid, Chief Engineer, of the Water-Works Department of McKeesport, Pa.

Mr. S. R. Ainslie, Vice-President and General Manager of the Chicago Terminal Transfer Co., of Chicago, has tendered his resignation, to take effect on August 1.

Mr. Wm. B. Ridgley, Vice-President of the Springfield Iron Co., of Springfield, Ill., has been appointed Manager of six mills of the Republic Iron & Steel Co., including those at Chicago and Minneapolis.

Mr. W. S. Smith, late with the Sargent Co., of Englewood, Ill., has been made the Manager of the Aurora Boiler Works, of Aurora, Ill. He expects to give especial attention to contracts for boilers, feed-water heaters, standpipes and sheet-iron work.

Mr. E. E. McLeod, Assistant General Passenger Agent of the Chicago, Rock Island & Pacific Ry., has been elected Chairman of the Western Passenger Association, to succeed Mr. B. D. Caldwell, who resigned to become Traffic Manager of the Delaware, Lackawanna & Western R. R.

Mr. Wm. C. Coffin, for five years past New York Manager for the Riter-Conley Mfg. Co., of Pittsburg, Pa., has gone to the home office as Vice-President of the company. Mr. S. W. Bowles, formerly Manager of the Boston office of the Berlin Iron Bridge Co., succeeds Mr. Coffin in the New York office.

Mr. George H. Campbell, Terminal Agent at Baltimore, of the Baltimore & Ohio R. R., will become Assistant General Superintendent, on July 1, with headquarters at Baltimore, Md. Mr. Campbell came to this company three years ago from the Cleveland, Cincinnati, Chicago & St. Louis Ry. Mr. D. A. Williams has been appointed General Storekeeper with headquarters in Baltimore.

Mr. W. W. Wentz, Jr., Superintendent of the Lehigh and Susquehanna Division of the Central R. R. of New Jersey, has been appointed Superintendent of the New Jersey Division, to succeed Mr. G. H. French, who has been made Superintendent of the New Jersey Southern Division. Mr. M. D. Clark has resigned as Superintendent of the New Jersey Southern Division, and will retire from the railway business.

OBITUARY.

Mr. D. Olyphant Talbot, of New York city, Purchasing Agent of the Wagner Palace Car Co., died on June 23, aged 48 years.

Prof. Kneeland X. Codman, Manager of the Codman Chemical Paint Co., died at Nashua, N. H., on June 27, aged 50 years.

Mr. Henry C. Relf, Resident Engineer of the Northern Pacific Ry., while inspecting a washout on his section of that railway near Plains, Mont., on June 9, slipped and fell into the rapids of the Clark's Fork of the Columbia River and was drowned. He was a member of the Montana Society of Engineers.

Mr. Henry A. Daniels, Chief Engineer of the Sing Sing Water-Works, Sing Sing, N. Y., died of Bright's disease, on June 24, aged 59 years. He was formerly Chief Engineer of the Water-Works of Yonkers, N. Y., and also served in a similar capacity with the Manhattan Brass Co., of New York, for some years.

Mr. John G. Moore, senior member of the firm of Moore & Schley, died at his home in New York, on June 23, aged 52 years. He has organized and financiered many important concerns, among them being the National Dredging Co., of Wilmington, Del., the Mutual Union Telegraph Co., the Missouri Pacific Ry. and the Tennessee Coal, Iron & Railroad Co.

Mr. Henry B. Plant, President of the Plant System of Railways, died at his home in New York city, on June 23, from a complication of diseases. He was born in Branford, Conn., in 1819, and in 1837 entered the service of the New Haven Steamboat Co. Upon the formation of the Adams Express Co. he went South, and in 1854 was appointed Superintendent of the Southern Division of the Adams Express Co. The Southern Express Co. was organized by him in 1861. In 1879 Mr. Plant, with others, bought the Atlantic & Gulf R. R., of Georgia, and reorganized it as the Savannah, Florida & Western Ry. From this time on he has been active in the reorganization of the old companies and construction of new lines in the South, among which are the South Florida Ry., the Brunswick & Western R. R., the Alabama Midland Ry., the Silver Springs, Ocala & Gulf Ry., the Tampa & Thonotosassa R. R., the Abbeville Southern Ry., the Florida Southern Ry. and the Sanford & St. Petersburg R. R. Several lines of steamships have also been established through his efforts, including the Plant Steamship line for service between Port Tampa, Fla., and Havana, Cuba.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

MONTANA SOCIETY OF ENGINEERS.
July 8. Butte, Mont. Secy., A. S. Hovey, Nat'l Bank Bldg., Helena, Mont.
THE LOUISIANA ENGINEERING SOCIETY.
July 10. Secy., J. F. Coleman, 712 Union St., New Orleans, La.
WISCONSIN STATE CHEMICAL ASSOCIATION.
July 13. Secy., I. Ladoff, 154 Knapp St., Milwaukee, Wis.
CONNECTICUT ASSOCIATION OF CIVIL ENGINEERS AND SURVEYORS.
July 18. Holyoke, Mass. Secy., G. K. Crandall, New London, Conn.
AMERICAN BOILER MANUFACTURERS' ASSOCIATION.
July 24-27. Annual meeting, Cleveland, O. Secy., J. D. Farasey, Cleveland, O.
INTERNATIONAL ASSOCIATION FOR TESTING MATERIALS. AMERICAN SECTION.
Aug. 15, 16. Annual meeting at Pittsburg, Pa. Secy., Richard L. Humphrey, City Hall, Philadelphia, Pa.
SOCIETY FOR THE PROMOTION OF ENGINEERING EDUCATION.
Aug 17-19. Annual meeting, Columbus, O. Secy., Albert Kingsbury, Durham, N. H.
AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.
Aug. 21-26. Annual meeting at Columbus, O. Secy., Prof. Frederick Bedell, Ithaca, N. Y. Local Secy., Prof. B. F. Thomas, Columbus, O.
ASSOCIATION OF EDISON ILLUMINATING COMPANIES.
Sept. 12. Annual meeting, Philadelphia. Secy., Wilson S. Howell, P. O. Box 114, Newark, N. J.
AMERICAN INSTITUTE OF MINING ENGINEERS.
Sept. 25. Annual meeting, San Francisco, Cal. Secy., R. W. Raymond, 99 John St., New York city.
EASTERN MAINTENANCE OF WAY ASSOCIATION.
Sept. 26. Portland, Me. Secy., F. C. Stowell, B. & M. R. R., Ware, Mass.

AMERICAN BOILER MANUFACTURERS' ASSOCIATION.—The annual meeting of this association will be held at Cleveland, O., on July 24-27.

ASSOCIATION OF EDISON ILLUMINATING COMPANIES.—The annual convention of this association will be held at Philadelphia on Sept. 12, 1899.

Wilson S. Howell, Secy.

AMERICAN SECTION OF THE INTERNATIONAL ASSOCIATION FOR THE TESTING OF MATERIALS.—The second annual convention of this association will be held at Pittsburg, Pa., Aug. 15-16, 1899.

Richard L. Humphrey, Secy.

THE CONNECTICUT ASSOCIATION OF CIVIL ENGINEERS AND SURVEYORS.—The summer meeting of this association will be held on July 18. The meeting will consist of an excursion from Hartford to Holyoke and Mt. Tom, Mass. In Holyoke the new dam of the Holyoke Water Power Co. will be inspected.

MONTANA SOCIETY OF ENGINEERS.—A regular meeting of this society was held at Helena, Mont., on June 10, at which the proposed amendment to the constitution to change the headquarters of the society to Butte was fully discussed. The next meeting, which is scheduled for July 8, will be held in Butte.

ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.—This association will continue its work through the entire summer season, substituting engineering excursions for the usual papers. These trips will include visits to large irrigation works, harbor improvements, beet sugar plants, etc.

Frank Van Vleck, Secy.

FRANKLIN INSTITUTE.—At the regular meeting, held on June 21, Mr. T. B. Kinraide, of Jamaica Plains, Mass., who was recently brought so prominently before the public through his connection with the Keeley expose, delivered an address on the subject of the application of "Photography to the Study of the Structure of Electrical Discharges."

THE ENGINEERS' CLUB OF COLUMBUS.—The last meeting of this club for the season was held on June 17, to attend a lecture, entitled "Observations of a Flying Trip Through the Mining Regions of Washington," which was presented by Prof. Edward Orton, Jr. This was a description of the points of engineering interest observed by Prof. Orton in an extensive trip through this part of the country.

OHIO INSTITUTE OF MINING ENGINEERS.—The summer excursion of the institute was held June 20-21. The party left Columbus, O., on the morning of June 21, via the Columbus, Sandusky & Hocking Ry., arriving at Sandusky in time for dinner. In the afternoon the points of interest in and about Sandusky Bay were visited in a chartered steamer. The following day a geological excursion was made to Kelley's Island.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.—The regular monthly meeting of this society was held at the Society's House, Pittsburg, Pa., on June 20. It was decided to arrange for an outing for the society in the early part of July, in the form of an excursion up the river. A report was presented from the Smoke Committee as regards the rating of boilers and the best means of preventing smoke. It was ordered printed and distributed to the members. The paper of the evening, by Mr. F. E. House, General Superintendent P., B. & L. E. R. R. Co., Pittsburg, Pa., was received with much interest. He described the building of a tunnel, in which the methods were unique in several ways, and more especially in the fact that a great portion of the rock was removed with steam shovels worked by compressed air, the shovels being cut down so as to enter the tunnel.

ENGINEERS' CLUB OF ST. LOUIS.—A meeting of this club was held on May 17. Prof. F. E. Nipher presented a discussion on the elongation of steel bars as a function of the temperature and stress. Another meeting was held on June 7, at which Prof. J. H. Kinealy addressed the society on the subject of the Pohle Air Lift Pump. The action of the pump was illustrated by a small model, and it was explained that practically all the data used for designing were obtained from experiments with similar models.

THE PACIFIC COAST ELECTRIC TRANSMISSION ASSOCIATION.—The third annual meeting of this association was held at the Cliff House, San Francisco, Cal., on June 21. Papers were read by F. A. C. Perrine, giving data obtained in connection with a test of a 40-mile aluminum transmission line, and by John Marshall on "Electrical Lighting versus Gas."

Officers were elected for the ensuing year as follows: Pres., Prince Andre Poniatowski; Vice-Pres., A. G. Lamson; Secy., George P. Low; Treas., William Augus. It was decided to hold future meetings at San Francisco.

WESTERN SOCIETY OF ENGINEERS.—At the meeting on June 21, Mr. Isham Randolph, Chief Engineer of the Chicago Drainage Canal, presented an abstract of his latest annual report, illustrated by lantern slides, of the Van Buren St. by-pass, the bridges over the canal, and the regulating works at the outfall. Mr. Randolph seemed to think it a pity that after the bridge department of the canal had prepared designs for an eight-track swing bridge, competitive designs should have been admitted, but it must be remembered that the railways interested made objections to the swing bridge. All the bridges have through trusses, and are of the general type illustrated in our issue of Dec. 2, 1897. Two specially interesting styles of bridges were referred to: (1) the bobtail swing bridges designed by Mr. C. L. Strobel, having a short shore arm, the turntable track being built on the solid rock of the bank of the canal, and the double truss four-track bridge for the Belt R. R., which was designed by Mr. W. M. Hughes. The latter has long floor beams, carrying one track astride of each truss. It was stated that work is being pushed, in order to try and have the canal ready to open by December of this year.

IRON AND STEEL INSTITUTE.—The autumn meeting of this association will be held Aug. 15-18, 1899, at Manchester, England. The programme will embrace visits on Aug. 15 to the Lancashire & Yorkshire Railway Co.'s Locomotive Works and Steel Foundry at Horwich, or to the Simon-Carves Coke Ovens at the Barrow Steel Co.'s Collieries and at the Wharncliffe Silkstone Collieries, near Barnesley. On Aug. 16 there will be a trip on the Manchester Ship Canal, and on Aug. 17 visits will be made to the very extensive machine and iron works of Messrs. Platt Brothers, Oldham, and to the cotton mill of the Pine Co., Oldham, or to the extensive boiler works of Messrs. Galloways, Limited, at Ardwick, and to the cotton mills and weaving sheds of Messrs. R. Haworth & Sons, Ordsall, Salford.

On Aug. 15 the Lord Mayor of Manchester will give a reception of the members of the institute and the ladies accompanying them in the Town Hall. On the evening of Aug. 16 there will be a special dramatic performance in the theatre Royal, to which the members and the ladies accompanying them will be invited.

The excursions on Aug. 18 will occupy the whole day. After visiting Messrs. Kendall and Gent's new machine works, the members and ladies accompanying them will proceed by train to Bakewell and visit Haddon Hall, Rowsley and Chatsworth. There will be an alternative excursion to visit the Crewe Works of the London & North-Western Ry. During the meeting a large number of the leading works in the Manchester district will be open to members.

Bennett H. Brough, Secy.

NEW PUBLICATIONS.

PAN-AMERICAN EXPOSITION AT BUFFALO, N. Y., MAY 1 TO MAR. 1, 1901.—Edwin Fleming, Secretary, Buffalo, N. Y. Paper; 3 × 6 ins.; pp. 32; illustrated.

This is a tasteful little pamphlet describing in a general way what has been done and proposed towards the Exposition in the interests of the countries of North and South America.

THE INFLUENCE OF MECHANICAL DRAFT UPON THE ULTIMATE EFFICIENCY OF STEAM BOILERS.—By Walter B. Snow. Boston: B. F. Sturtevant Co. Paper; 6½ × 9 ins.; pp. 22; illustrated.

This is a reprint of a paper printed in "The Columbia Engineer" and presented originally before the Engineering Society of Columbia University, New York city.

TRANSACTIONS OF THE ASSOCIATION OF CIVIL ENGINEERS OF CORNELL UNIVERSITY FOR 1898-9.—Containing Addresses by Non-Resident Lecturers, Miscellaneous Papers, Constitution and List of Members of the Association. Wager Fisher, Managing Editor. Ithaca, N. Y.: Published by the Association. Paper; 6 × 9 ins.; pp. 159; illustrated.

This volume contains the following papers: "The Corps of Engineers of the United States Army and Some of Its Works," by Major Thomas W. Symons. "Notes on the Use of Concrete in Dams, with a Description of the Cold Spring Dam," by Noah Cummings. "Data of Stream Flow in Relation to Forests," by George W. Rafter. "Maintenance of Way," by William M. Torrance. "Locks and Lock-Gates for Ship Canals," by Henry Goldmark. "On the Design of a Two-Hinged Arch Rib," by Prof. Henry S. Jacoby. "Stand-Pipe and Pump-House Foun-

dations," by A. E. Duckham. "The Present Status of Engineering Knowledge Respecting Masonry Construction," by David Molitor. "The Abolition of Grade Crossings in the City of Buffalo, N. Y.," by J. A. Knighton.

REPORT OF THE PROVINCIAL INSTRUCTOR IN ROAD-MAKING IN ONTARIO.—A. W. Campbell, Instructor, Toronto: Department of Agriculture. Paper; 6 × 9 ins.; pp. 80; illustrated.

This is the third annual report of the Ontario Instructor in Road-Making. It reviews the work of the year and the advances made in some sections of the Province. Many useful suggestions are given, both relating to country and town roads and streets. A form of specifications for cement-concrete walks is included and a number of the before-and-after pictures, without which last feature a good-roads publication would hardly be considered as in good standing.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3¾ x 6 ins., and 9 x 12 ins.)

CHAIN HOISTS.—The Chisholm & Moore Mfg. Co., Cleveland, O. Pamph.; 6 × 9 ins.; pp. 24; illustrated.

This pamphlet describes the forms of chain hoists operated by hand and by air and electric motors which are manufactured by the above firm.

FREIGHT-CAR ROOFS.—G. B. Hutchins & Sons, Detroit, Mich. Pamphs.; 3 × 6 ins.; 6 × 7½ ins.; pp. 12, pp. 4; illustrated.

These pamphlets describe the galvanized iron and plastic felt and cement freight-car roofs made by the above firm.

WIRE AND IRON GOODS.—Toledo Wire & Iron Works, Toledo, O. Paper; 7 × 11 ins.; pp. 88; illustrated.

This catalogue illustrates and gives the prices of a great variety of wire and cast and wrought-iron articles, including wire cloth, wire fencing, spark arresters, railings, finials, gratings, sidewalk lights, window guards, counter railings, crestings, etc., etc.

WIRE AND IRON WORK.—Donovan Wire & Iron Works, Toledo, O. Paper; 9½ × 12 ins.; pp. 48; illustrated.

This catalogue illustrates various forms of ornamental iron and wire work, including notably elevator cars and enclosure, ornamental fencing, stair and counter railings, crestings, sidewalk gratings and covers, etc., etc.

WATER LIFT.—The Columbus Brass Co., Columbus, O. Paper; 3 × 6 ins.; pp. 13; illustrated.

This pamphlet describes the Wilkins universal hydraulic water lift, which utilizes city water pressure for pumping either city water or rainwater to higher sources than can be reached by the normal city pressure.

SERVICE BOXES AND OTHER SPECIALTIES.—The Flush Tank Co., Aurora, Ill. Paper; 6 × 9 ins.; pp. 24; illustrated.

This pamphlet describes service boxes for water and gas, adjustable expansion insulators for steam and hot water pipes, adjustable soil pipe fittings, automatic siphons and other specialties.

HOISTING BUCKETS, BARROWS AND CARS.—C. L. Steubner, Long Island City, N. Y. Paper; 6½ × 9 ins.; pp. 155; illustrated.

This is an illustrated descriptive catalogue and price-list of a great variety of hoisting buckets and skips for coal, ore, rock, earth, etc.; hooks and blocks; tip and dump cars; charging cars and wagons; portable track, track fittings and rails; wheelbarrows; asphalt trucks and melting furnaces; coal screens, etc., etc. A number of tables of useful engineering information conclude the volume.

ACETYLENE GAS.—F. Cortez Wilson & Co., 239 Lake St., Chicago, Ill. Paper; 3½ × 6¾ ins.; three pamphlets, 40, 30 and 12 pp. illustrated; 10, 5 and 5 cts.

The largest pamphlet is a hand-book for acetylene dealers, giving particulars of the equipment, cost, handling of apparatus, directions for installation, insurance requirements, etc., with price list of fixtures, etc. The other pamphlet describes the company's acetogen or generating apparatus, and also describes the manufacture and use of the gas. The small pamphlet contains quotations from a number of writers on the subject and extracts from technical papers.

WONDERLAND.—Passenger Department, Northern Pacific Ry., St. Paul, Minn. Paper; 7 × 9¾ ins.; pp. 104; illustrated.

The sub-title of this handsomely printed and illustrated pamphlet states it to be an illustrated description of the region tributary to the Northern Pacific Ry. Briefly described, it is the familiar mixture of history, anecdote and chatty description of natural scenery, with which the passenger agents of the large railway systems endeavor to excite interest in and stimulate a desire to visit the resorts and scenic attractions along their lines. The pamphlet is very readable, and also contains a variety of interesting and useful information.

CRANES.—The Brown Hoisting & Conveying Machine Co., Cleveland, O. Cloth; 9 × 6 ins.; pp. 175; illustrated.

This is the most complete catalogue of cranes which we recall having ever seen. Besides the standard types of cranes generally made by crane builders, the book illustrates and describes fully the high-speed gantry and cantilever traveling cranes, which are the special product of the firm, and a number of new devices in the shape of cranes, hoists and travelers. One of the latter is an electric overhead traveler system which is being used considerably and which seems from the description and illustrations given to promise unusually well. Among the different classes of cranes illustrated and described are the following, which give some idea of the scope of the contents of the catalogue: Locomotive cranes, electric traveling cranes; cantilever and gantry traveling cranes; hand traveling cranes; jib cranes; pulley block jib cranes; stationary hand bridge cranes; pillar and wrecking cranes; hand track cranes; overhead tram rail and trolleys; electric tram rail and trolley; safety crabs and winches, and railway transfer tables.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
June 29.	Heating, electric lighting, etc.,	New York	June 22
June 29.	Filter basin, etc.,	Phoenixville, Pa.	June 22
	Advertised, Eng. News, June 22 and 29.		
June 29.	Bridge,	Cape May, N. J.	June 22
	Advertised, Engineering News, June 22.		
June 30.	Water-Works,	Chapel Hill, N. C.	June 15
	Advertised, Engineering News, June 15.		
June 30.	Water-works,	Michigan City, Ind.	June 22
	Advertised, Eng. News, June 22 and 29.		
June 30.	School buildings,	Philadelphia, Pa.	June 29
June 30.	Power house, etc.,	Boston, Mass.	June 29
July 1.	Revetments,	Duluth, Minn.	June 1
	Advertised, Eng. News, June 1 to 22.		
July 1.	Sewers,	Larchmont, N. Y.	June 15
	Advertised, Engineering News, June 15.		
July 1.	Roof for building,	New York, N. Y.	June 22
July 1.	School building,	Yonkers, N. Y.	June 22
July 1.	Public building,	Chicago, Ill.	June 22
July 1.	Church building,	New Bedford, Mass.	June 29
July 1.	Water works,	Morton, Minn.	June 29
July 1.	Water-works,	Tupper Lake, N. Y.	June 29
July 3.	Water softening plant,	Winnipeg, Man.	May 25
July 3.	Levee work,	Memphis, Tenn.	June 8
	Advertised, Eng. News, June 8 to 29.		
July 3.	Bridge,	Hornellsville, N. Y.	June 15
	Advertised, Eng. News, June 1 and 8.		
July 3.	Bridges (10),	Kentland, Ind.	June 22
July 3.	Tubular boilers (3),	Columbus, O.	June 22
July 3.	Pumping engine,	Grand Forks, N. Dak.	June 22
July 3.	Paving,	Topeka, Kan.	June 29
July 3.	Steel bridge,	Brant, Ont.	June 29
July 3.	Bridges (2),	Washburn, N. Dak.	June 29
July 3.	Bridge,	Carrolton, Mo.	June 29
July 3.	Artesian well,	Frostburg, Md.	June 29
July 3.	Brick paving,	Chester, Pa.	June 29
July 4.	Pavilions (9),	Alexandria Bay, N. Y.	June 29
July 4.	Bridge,	Thomaston, Ga.	June 29
July 4.	Asphalt paving,	Trenton, N. J.	June 29
July 5.	Supplies,	Memphis, Tenn.	June 8
	Advertised, Eng. News, June 8 to 29.		
July 5.	Sewers,	Cohoes, N. Y.	June 22
	Advertised, Engineering News, June 22.		
July 5.	U. S. building work,	Minneapolis, Minn.	June 22
July 5.	Steel bridges (5),	Fowler, Ind.	June 22
July 5.	Brick paving,	Chillicothe, O.	June 22
	Advertised, Engineering News, June 22.		
July 5.	Church building,	South Norwalk, Conn.	June 29
July 5.	Dormitories, etc.,	New York.	June 29
July 5.	Bridges (2),	Rockville, Ind.	June 29
July 5.	Water tower,	Fairbury, Ill.	June 29
July 5.	Park work,	Newark, N. J.	June 29
	Advertised, Engineering News, June 29.		
July 6.	Breakwater,	Duluth, Minn.	June 8
	Advertised, Eng. News, June 8 to 29.		
July 6.	School building,	Le Roy, Minn.	June 15
July 6.	Steam heating,	New Orleans, La.	June 15
July 6.	Water-works,	Freeport, O.	June 22
June 6.	Steel bridges (2),	Lima, O.	June 22
	Advertised, Eng. News, June 22 and 29.		
July 6.	Electric plant,	Grand Forks, N. Dak.	June 29
July 6.	Bridge,	Ellensburg, Wash.	June 29
July 6.	Sewers and bonds,	East Liverpool, O.	June 29
July 6.	Brick paving,	Rome, N. Y.	June 29
	Advertised, Engineering News, June 29.		
July 6.	School building,	Mansfield, O.	June 29
July 6.	Steel bridge,	Covington, Ky.	June 29
July 6.	Pier,	Northampton, Mass.	June 29
	Advertised, Eng. News, June 29 and July 6.		
July 7.	Hospital plans,	Redding, Cal.	June 8
July 7.	Dredging,	Carver's Harbor, Me.	June 8
	Advertised, Eng. News, June 8 to 22.		
July 7.	Garbage disposal plant,	E. Liverpool, O.	June 15
	Advertised, Eng. News, June 15 and 22.		
July 7.	Electric plants,	Fort Point, Cal.	June 15
July 7.	Water pipe, etc.,	Kansas City, Mo.	June 15
	Advertised, Eng. News, June 15 to 29.		
July 7.	Electric and water plants,	Girard, Pa.	June 22
	Advertised, Engineering News, June 22.		
July 7.	Stone bridge,	Eldorado, Kan.	June 29
July 7.	Steel bridge,	Albion, Mich.	June 29
July 7.	Pipe sewers,	Albion, Mich.	June 29
July 7.	Improving water-works,	Minot, N. Dak.	June 29
July 7.	Excavation,	New York, N. Y.	June 29
July 7.	Crushed stone,	Toledo, O.	June 29
July 7.	Steam piping, etc.,	Chicago, Ill.	June 29
July 7.	Bridge,	Greenfield, Ind.	June 29
July 8.	Street improvement,	Mansfield, O.	June 22
July 8.	Steel bridge,	Dickinson, N. Dak.	June 22
July 8.	Bridge,	Coquille, Ore.	June 22
July 8.	Water bonds,	Calgary, N. W. Ter.	June 22
July 8.	Paving,	Youngstown, O.	June 29
July 8.	Steel bridge,	Greens Fork, Ind.	June 29
July 8.	Water pipe and castings,	Syracuse, N. Y.	June 29
	Advertised, Engineering News, June 29.		
July 8.	Sewers,	Depew, N. Y.	June 29
	Advertised, Engineering News, June 29.		
July 8.	Grading,	Washington, D. C.	June 29
	Advertised, Engineering News, June 29.		
July 8.	Grading,	Youngstown, O.	June 29
July 8.	Steel bridge,	Bement, Ill.	June 29
July 9.	Water pipe,	Lansingburg, N. Y.	June 22
	Advertised, Eng. News, June 22 and 29.		
July 9.	Macadamizing,	Lake City, Colo.	June 29
July 10.	Excavating,	Washington, D. C.	June 15
	Advertised, Eng. News, June 15 to July 6.		
July 10.	Breakwater,	Newport, R. I.	June 15
	Advertised, Eng. News, June 15 to July 6.		
July 10.	Dredging,	Wilmington, Del.	June 15
	Advertised, Eng. News, June 15 to July 6.		
July 10.	Main sewer,	East Orange, N. J.	June 22
	Advertised, Eng. News, June 22 to July 6.		
July 10.	Sewerage system,	Wallace, Idaho	June 22
July 10.	Outfall sewer,	Westboro, Mass.	June 22
	Advertised, Engineering News, June 22.		
July 10.	Sewers,	Hackensack, N. J.	June 22
	Advertised, Eng. News, June 22 and 29.		
July 10.	Paving,	South Bend, Ind.	June 22
July 10.	Bridge,	Greenfield, Ind.	June 22
July 10.	Steel bridge,	Fargo, N. Dak.	June 22
July 10.	Building road,	Rathdrum, Idaho	June 22
July 10.	Heating,	Hallock, Minn.	June 29
July 10.	College buildings,	Manhattan, Kan.	June 29
July 10.	Electric plant,	Grimsby, England.	June 29
July 10.	Bridge work,	Vincennes, Ind.	June 29
July 10.	Bridge,	Sturgis, S. Dak.	June 29
July 10.	Bridge bonds ($25,000),	Youngstown, O.	June 29
July 10.	Private pier,	Lockport, La.	June 29
July 10.	Grading,	Celina, O.	June 29
July 11.	Steel bridges (4),	Urbana, Ill.	June 29
July 12.	Army quarters,	West Point, N. Y.	June 15
July 12.	Jetty,	Buffalo, N. Y.	June 15
	Advertised, Eng. News, June 15 to July 6.		
July 12.	Repairing dikes,	Manasquan River, N. J.	June 15
	Advertised, Eng. News, June 15 to July 6.		
July 12.	Sewers,	Somerset, Pa.	June 22
	Advertised, Engineering News, June 22.		
July 12.	Army barracks,	Newport, R. I.	June 29
July 12.	School building,	Lima, O.	June 29
July 12.	Steel bridge,	Camden, N. J.	June 29
	Advertised, Eng. News, June 29 and July 6.		
No date.	Electric plant,	Seymour, Ia.	June 22
	Advertised, Engineering News, June 22.		
"	Electric railway (30 mls),	Indianapolis, Ind.	June 22
"	Artesian well,	Fort Gaines, Ga.	June 22
No date.	Light railway,	Cape of Good Hope	June 29
"	Steam heating,	Danville, Ill.	June 29

RAILWAYS.

ATLANTA, KNOXVILLE & NORTHERN.—Improvements to cost about $500,000 will be made on this line this summer, including the cutting down of the heavy grades. It is also expected to make a new survey between Marietta and Atlanta. Jos. McWilliams, Mgr., Marietta, Ga.

BOSTON, CATSKILL MOUNTAIN & LACKAWANNA.—Reports state that a new effort is about to be made to build this proposed line from Boston, Mass., to Scranton, Pa., and the coal fields of Lackawanna county. It will cross the Erie R. R. at Deposit, N. Y. Partial surveys were made two years ago.

CAPE OF GOOD HOPE.—Bids are being received by the government of the Cape of Good Hope for the construction, with and without equipment, of a light 2-ft. gage railway from Port Elizabeth to Avontour, about 180 miles, 80 miles of which will be constructed at first. Address the Agent-General, 112 Victoria St., London, S. W., England.

DAHLONEGA.—This company was incorporated in Georgia, June 22, with a capital stock of $300,000, to construct a line from Dahlonega, Ga., to the Southern Ry., a distance of 30 miles. J. W. Adams, Chattanooga, Tenn.; W. P. Price, Dahlonega, are incorporators.

DENTON & WESTERN.—This company has been organized at Denton, Tex., to construct a railway from Denton to Krum, on the Atchison, Topeka & Santa Fe Ry., eight miles. J. T. Bottorff, Chn. of Com.

DULUTH, MISSISSIPPI RIVER & NORTHERN.—Foley Bros., St. Paul, Minn., are reported to have received the contract for constructing an extension of this line from Hibbing to Virginia, Minn. The locations have been completed. I. N. Gray, Ch. Engr., Swan River, Minn.

EAST LOUISIANA EXTENSION.—W. W. Babbington, Pres., Franklinton, La., informs us that the right of way has been obtained and the surveys made for this proposed extension of the East Louisiana R. R. from Covington to Franklinton, 26 miles. The capital for construction has not yet been secured, but some of the capital stock has been subscribed for.

ELLWOOD SOUTHERN.—This company was incorporated in Pennsylvania, June 22, with a capital stock of $25,000, to construct a steam railway from Ellwood City to Hazen's Mines, Beaver county, Pa. Robert H. Todd, Pres.; Jay C. Leohner and C. F. Buchanan, of Ellwood City; and J. H. Bragdon, Pittsburg, Pa., are incorporators.

GREENBRIER.—Decatur Axtell, Vice-Pres. of Chesapeake & Ohio Ry. Co., Richmond, Va., informs us that the construction of 95 miles of road to the forks of the Columbia River is contemplated, and that it is hoped to complete the work by the spring of 1901. H. C. Simms, Pres., Huntington, W. Va.

GULF & BRAZOS VALLEY.—A. D. Emerson, Lakota, Tex., is reported to be at work on the grading of this line between Mineral Wells and Jacksboro, Tex., 30 miles; grading has already been completed from Lampasas to Comfort, 65 miles. Surveys have been made from Red River to Peck City, 110 miles, and new surveys are under way from Peck City to Lampasas.

IOWA, MINNESOTA & NORTHWESTERN.—Winston Bros., St. Paul, Minn., are stated to have received the contract for constructing this line from Blue Earth, Minn., towards Belle Plaine, Ia., via Lake Mills, Mason City and Parkersburg, 166 miles. The maximum grade will be .6%. C. T. Dike, Ch. Engr., Mason City, Ia.

MacDONALD & BLUEFELD.—Incorporated in West Virginia June 12 to build from MacDonald to Beckley and Bluefield, Mercer county, connecting with the Loup Creek branch of the Chesapeake & Ohio at MacDonald, and with the Norfolk & Western at Bluefield. The incorporators are Symington MacDonald and Saml Dixon, MacDonald; Enoch Smith and M. P. Ruffner, Charleston, W. Va.

MEXICO.—Reports state that J. M. Nuland and H. R. Yerxa, of Los Angeles, Cal., have received a valuable concession for the building of a railway from Cordova, State of Vera Cruz, to the Isthmus of Tehuantepec. The work will be finished in two years.

MINNEAPOLIS & ST. LOUIS.—We are informed that work is well under way on the extension of this line from New Ulm, Minn., to Storm Lake, Ia., via St. James and Sherburn, Minn., and Estherville, Spencer and Sioux Rapids, Ia., 138 miles. All surveys have been made, the right of way obtained, and the engineering corps stationed. The chief contractors, Johnston Bros. & Faught, St. Elmo, Ill.; and John Scott & Sons, St. Louis, Mo., have all their work covered. On the second division, between Spencer and Storm Lake, 38 miles, there are 300 teams at work. The other contractors besides John Scott & Sons are, Messrs. Gillespie and Kilpatrick, James Kielly, John Maloney and R. J. Macdonald. H. G. Kelly, Ch. Engr., 1124 Guaranty Loan Bldg., Minneapolis, Minn.

MORGANTOWN & KINGWOOD.—The Valley district near Morgantown, W. Va., is reported to have voted $15,000 in aid of the construction of a railway between Morgantown and Kingwood. The Morgan district also voted to issue bonds for the same purpose. This company was incorporated Jan. 15, with a capital stock of $200,000. Geo. C. Sturgis, Pres., Morgantown.

MOUNT AIRY & EASTERN.—Incorporated in North Carolina, with $26,000 capital stock, to construct about five miles of railway from Mount Airy, N. C., to the state line. T. E. Houston, Pres., Elkhorn, W. Va.; W. W. Wyche and A. H. Patton, Welch, W. Va., directors.

OFFERMAN & WESTERN.—This company was incorporated in Georgia, June 21, with a capital stock of $200,000, to construct a line from Offerman, Pierce county, to Coffee, via Appling, Ga. Work is to begin at once. J. J. McDonough, Savannah, Ga.; Charles McCall, Offerman, and J. C. McDonald, Waycross, Ga., are incorporators.

PACIFIC & ARCTIC RY. & NAVIGATION.—Incorporated in Washington June 14 with $1,000,000 capital stock, to construct railway, telegraph and telephone lines from Lynn Canal, Alaska, to Summit Lake. T. W. Moore and W. Gillett, New York; and Edwin Midgley, London, England, are incorporators.

PARRAL & DURANGO.—S. E. Gill, Pres., Pittsburg, Pa., informs us that the preliminary surveys and rights of way have mostly been made and secured for this line from Parral to Boca de San Jose, via Minas Neuvas, Mexico, a distance of from 45 to 50 miles. Jolly Bros., Pittsburg, Pa., the contractors, have the grading well under way. J. H. Thomas, Ch. Engr., Parral, Mexico.

PENNSYLVANIA.—At a meeting in Reading, Pa., of those interested in the proposed railway from Reading to Bernville, a committee of ten was appointed to go over the route and secure the right of way. J. B. Miller, Chn.

PITTSBURG & ALLEGHENY.—Incorporated in Pennsylvania, June 26, with $100,000 capital stock, to construct a steam railway between these cities. G. E. Macklin, Pres., Pittsburg, Pa.; P. G. Jenks and A. R. Bassett, Allegheny, Pa., are incorporators.

ST. LOUIS, MOREHOUSE & SOUTHERN.—This company has been incorporated in Missouri with a capital of $150,000, to construct a standard-gage railway from Morehouse to Pascola, a distance of 45 miles. Isaac Himmelberg, Clarence Brown and Wm. H. Harrison, Morehouse, Mo., are incorporators.

SAWYER & AUSTIN LUMBER CO.—This company is stated to have awarded the contract for constructing about twelve miles of broad-gage railway from Pine Bluff, Ark., to a point in Grant county, to the Arkansas Construction Co., Little Rock, Ark. A further extension to Sheridan, Ark., is proposed. Active work is expected to begin soon.

SEABOARD AIR LINE.—M. J. Condon, Knoxville, Tenn., is reported to have been awarded the contract June 27 for constructing an extension of this system from Cheraw to Camden, S. C., and thence to a connection with the Florida Central and Peninsular R. R. at or near Columbia, S. C. Grading is to begin next week, and enough 80-lb. steel rails have been ordered to cover 100 miles of territory, or more than enough for above extension. Work must be completed before Dec. 15, and, in connection with the Ridgeway & Richmond extension, will give the Seaboard Air Line a solid track from Richmond, Va., through Columbia and Savannah to Tampa, Fla.

SHADY VALLEY.—Incorporated in Tennessee June 12 with a capital stock of $50,000, to build from the Virginia state line through Johnson county along Beaver Dam Creek to the foot of Crop Mountain.

TRINITY VALLEY.—Incorporated in Texas, June 14, with a capital stock of $100,000, to construct a railway from Dodge to Beaumont, Tex., 90 miles. J. T. Carey and Robert Bush, Dodge, Tex., and I. J. Harris, Palestine.

VELASCO SUBURBAN & BELT.—This company was incorporated in Texas, June 16, with $25,000 capital stock, to construct a line from Velasco to the Surfside hotel near the Gulf of Mexico, a distance of 1½ miles. It is also proposed to extend it to the jetties at the mouth of the Brazos River, a distance of 9 miles.

STREET AND ELECTRIC RAILWAYS.

BROCKTON, MASS.—The Brockton, Canton & Dedham St. Ry. Co. is being organized, with a proposed capital stock of $200,000, to build between the cities named. John J. Whipple, 52 Boylston St., Boston; Fred. C. Hinds, 53 State St., Boston, and Chas. T. Field, 79 Belair St.

GREENFIELD, MASS.—Frank E. Lowe, Pres. of Greenfield & Turners Falls St. Ry. Co., Greenfield, informs us that the extension of his line to Montague, 2½ miles distant, is expected to be completed by July 1. The contract is held by the Bay State Construction Co., Greenfield.

MANSFIELD, MASS.—The Mansfield, East Foxboro & Sharon St. Ry. has been organized to construct a street railway from Mansfield to East Foxboro, Elm Lawn and Sharon. Patrick Shields, Mansfield, and E. F. Draper, Weymouth, Mass., are directors.

NORTHBRIDGE, MASS.—The selectmen of this town have granted a franchise to the Worcester & Blackstone Valley St. Ry. Co. to extend its line from Rocndale to Whitinsville four miles. Work is to begin at once.

SOUTH FRAMINGHAM, MASS.—The South Middlesex St. Ry. is preparing to enlarge its power house on Waverly st., and to instal therein a McIntosh & Seymour tandem compound engine of about 175 HP., and a new Westinghouse generator. H. L. Brown, Ch. Engr.

TAUNTON, MASS.—McCauley & Co., Boston, Mass., are reported to have been awarded the contract for building the Taunton & Middleboro St. Ry. The rails have been bought, and work is to begin in July.

WALTHAM, MASS.—The Waltham, Ayer & Pepperell St. Ry. has been fully organized, and preliminary surveys are to be made at once so as to commence the work, if possible, by Aug. 1. F. S. Arnold, Pres., Malden.

WESTFIELD, MASS.—F. T. Ley & Co., Springfield, Mass., have been awarded the contract for constructing an extension of the Woronoco St. Ry. from Westfield to the Springfield Ry. in Springfield, including the construction of three bridges. The stone work of the bridges has been sub-let to the Flynt Granite Works, Monson, Mass., and the iron work to the Walsh Boiler & Iron Works, Westfield. Work has been begun; estimated cost, $56,000. The other bidders on road construction were: O'Connell & Co., Holyoke, Mass.; W. H. Maxwell, Boston; R. D. Maynor & Co., Springfield, and A. H. Wright & Co., Springfield. J. H. Bryan, Pres. and Mgr.

PLAINVILLE, CONN.—F. G. Platt, Treas. of Central Ry & Electric Co., New Britain, Conn., informs us that his company is building 2½ miles of line from Plainville towards Southington, and that the Meriden, Southington and Compounce Tramway Co. is building 2½ miles from Southington to meet the extension of the Central Ry. & Electric Co.'s line from Plainville. Fred. T. Ley & Co., Springfield, Mass., have the contract for building the section from Plainville. Reports state that the contract for 2½ miles of overhead wire on this section has been let to Holmes, Booth & Haydens, Waterbury, Conn., and the contract for the rest of the overhead work to the General Electric Co. Francis Atwater, Pres., Meriden, Southington & Compounce Tramway Co., Meriden.

BROOKLYN, N. Y.—The Kings County Elevated R. R. will be sold under foreclosure on July 6, according to reports, at the Kings County Court House; upset price, $1,750,000.

MOUNT VERNON, N. Y.—The New York, Westchester & Connecticut Traction Co. has been granted a franchise to construct a double-track line in this city.

ROCHESTER, N. Y.—Surveys are now being made for the proposed Rochester & Sodus Electric Ry. T. J. Nicholl, Pres.; Le Grand Brown, Ch. Engr.

BETHLEHEM, PA.—The Delaware Quarry & Construction Co., which holds the contract for building a new macadam road from Bethlehem to Nazareth, is stated to have also been awarded the contract for constructing the proposed trolley line along the same road. It is expected to be in operation by Sept. 1.

BUTLER, PA.—The Butler Passenger Ry. Co. was incorporated June 22, with $50,000 capital stock, to construct eight miles of electric railway in this borough. A. L. Reiber, Pres.; J. V. Ritts and Charles Duffy, Butler.

DARBY, PA.—The Darby & Clifton Heights St. Ry. Co. was incorporated June 16, with $6,000 capital stock, to build in Delaware county. Wm. H. Fox, Pres., and Alfred Weeks, Jr., Philadelphia, Pa., and Richard A. Whiley, Sharon Hill, Pa., are incorporators.

McKEESPORT, PA.—The East McKeesport St. Ry. Co. was incorporated June 26 with a capital stock of $25,000, to construct a line in this city. C. S. Mitchell, Pres.; C. W. Lepper and F. H. Clark, of Pittsburg, incorporators.

MARPLE, PA.—The State Line Electric St. Ry. Co. was incorporated June 16 with a capital stock of $100,000, to construct an electric street railway from Cobb's Creek, Delaware county, to the Maryland state line. J. George Nagle, Pres., and Geo. A. Burnley, of Marple; John A. Barry, Philadelphia, are incorporators.

WILKESBARRE, PA.—Reports state that the syndicate which has purchased the stock of the Wilkesbarre & Wyoming Valley Traction Co. will make extensive improvements to increase the efficiency of the system. The chief of these improvements will be the extension of the Pittston line to Scranton and the putting on of special cars. The present line to Pittston will be double tracked all the way, and from Pittston the extension will be made to Scranton by the most direct route. The new company will be known as the Wilkesbarre, Wyoming & Scranton Ry. Co. J. W. Hollenback and W. G. Eno, of Wilkesbarre, are directors.

OLD POINT COMFORT, VA.—Plans have been completed, according to reports, for the new $100,000 power house and car barn to be erected at this place for the Newport News & Old Point Ry. Co. Henry Brauns, Arch., Baltimore, Md.

SCHUYLER, VA.—The Virginia Soapstone Co. is reported to have decided to construct an electric line connecting its quarries with Rock Fish Depot, six miles.

GREENVILLE, S. C.—The American Pipe Mfg. Co., 1319 Filbert St., Philadelphia, Pa., proposes to build an electric railway in this city, provided that the lighting contract held by the company be extended to 1919.

HUNTSVILLE, ALA.—The Huntsville Electric St. Ry. Co. was incorporated June 10, with $100,000 capital stock, to build about five miles of street railway. T. C. Dupont, Pres., Johnstown, Pa.; T. W. Pratt, Vice-Pres.

TULLAHOMA, TENN.—J. Y. Darlington, Atlanta, Ga., F. B. Smith, Chicago, and others, are interested in the construction of an electric railway from this town to Lynchburg, eight miles.

CLEVELAND, O.—The Cleveland & Eastern Ry. was incorporated, with $1,000,000 capital stock, by H. Clark Ford, H. B. McGraw and others, to build from Cleveland to Burton.

SPRINGFIELD, O.—Reports state that the stockholders of the Springfield Ry. Co. have decided to construct an interurban electric line between this city and Hillsboro, via Cedarville and Jamestown. S. L. Nelson, Treas. and Mgr.

KOKOMO, IND.—The Kokomo, Wabash & Northern R. R. Co. has been organized with $500,000 capital stock, to construct an electric railway between Wabash and Kokomo, 30 miles. Jacob Bruner and R. F. Lutz, Wabash, and J. M. Leach, Kokomo, are directors.

MARION, IND.—The Union Traction Co., Chas. L. Henry, Pres., of Anderson, Ind., is reported to have purchased the Marion City Ry., which operates 15 miles of track between Marion and Summitville.

MUNCIE, IND.—F. G. Brownell, Muncie, informs us that he has all the franchises and most of the right of way for the proposed Muncie Inter-Urban Ry. from Muncie to Hartford City and Dunkirk, via Royerton, Shidelar and Eaton, 30 miles. It is expected to organize the company within a few days, and to commence work soon.

TERRE HAUTE, IND.—The Terre Haute Electric Co. was incorporated June 24 with a capital stock of $1,000,000, to operate an electric railway in this city. W. R. McKeen, Demas Deming and J. G. McNutt, incorporators.

FARMINGTON, MICH.—The Wolverine Construction Co. is reported to have awarded B. F. Sullivan & Co. the contract for constructing 22 miles of track between Sand Hill and Farmington and Farmington Junction and Orchard Lake, connecting the Grand River Electric Ry. with the old Pontiac & Sylvan Lake Ry., and making a through line to Pontiac. This will make a total of 60 miles of track, to build which, at $10,000 a mile, the Detroit & Northwestern Electric Ry. Co. is expected to take out a mortgage to the Union Trust Co. for $900,000.

GRAND RAPIDS, MICH.—The Grand Rapids, Holland & Lake Michigan Electric R. R. Co. was incorporated here, June 14, with $100,000 capital stock, to construct a line from Grand Rapids to Holland, 25 miles. Wm. T. Hess, Pres.; A. O. Riopelle, Vice-Pres., Detroit, Mich.

EUREKA SPRINGS, ARK.—The Citizens' Electric Co. has been incorporated with $50,000 capital stock to construct a street railway. W. M. Duncan, A. R. Sayles and L. P. Bodger are stockholders.

SAN BERNARDINO, CAL.—The Arrowhead & Waterman Hot Springs & Ry. Co. has been incorporated, with $500,000 capital stock, to build through this city to the Arrowhead and the Waterman hot springs. Chas. T. Pepper, Pres., Los Angeles, Cal.; Jas. H. Boyd, Gen. Mgr., San Bernardino.

ELECTRIC LIGHT AND POWER.

BOSTON, MASS.—The aldermen have voted to install a plant at the Dover St. bath house at a cost of $1,300.

CONANICUT ISLAND, R. I.—We are informed that the following bids were received by Maj. D. W. Lockwood, U. S. Engr., Newport, R. I., for furnishing and installing an electric light and power plant in emplacement for two 12-in. B. L. rifles at the Dumplings, Conanicut Island, R. I.; B. O. Ellis, New York, $4,623; McCay Engineering Co., Baltimore, Md., $4,369; The United Co., New York, $5,274; Brown Electrical Construction Co., New Haven, Conn., $5,245; Edward Henton, Port Richmond, N. Y., $5,448; Chase, Shawmut Co., Boston, Mass., $4,449; Walworth Construction & Supply Co., $4,247; New Jersey Foundry & Machine Co., New York, $4,067; Priestman & Co., Inc., Philadelphia, Pa., $3,819; Newport Foundry & Machine Co., Newport, R. I., $4,760.

SOUTHPORT, CONN.—The Uncowa Water & Light Co. has engaged A. B. Hill, New Haven, Conn., to make a survey and to prepare plans for the proposed plant. Capital stock $100,000. Simon C. Sherwood, Pres.; O. T. Sherwood, Secy. and Treas.

ALEXANDRIA BAY, N. Y.—John Dunfee, Syracuse, N. Y., it is reported, will secure control of the plant here and of the submarine cables to the various islands of the Thousand Islands. Extensions are proposed.

JAMESTOWN, N. Y.—The question of building a plant to cost about $50,000 is being considered. Address Aldermen Thompson and Bailey.

LYNCHBURG, VA.—Edward G. Fry, Lynchburg, is preparing plans for a new power house 50 × 120 ft. for the Lynchburg St. Ry. & Electric Light Co.

MONROE, N. C.—Bids are asked until July 20 for furnishing the materials and for constructing a plant and water-works and for the purchase of $30,000 of 5% 30-year bonds, as stated in our advertising columns. Geo. C. Morgan, Engr., Chicago; J. G. Covington, Mayor.

WAYNESBORO, GA.—P. F. Corker writes us that bids will be wanted in about 60 days for constructing a plant for Mr. Corker, W. A. Wilkins and W. C. Hillhouse. It will have a capacity for 50 arc and 500 incandescent lights, estimated to cost $8,000. W. E. Jones, Mgr.

ANNISTON, ALA.—H. W. Sexton is reported as interested in a proposed plant.

MONTGOMERY, ALA.—Plans are reported as being prepared for a plant on the Tallapoosa River, to be located near the Tallassee Falls, about 30 miles from here, to be built by the Montgomery Water Power Co. The capital stock is $600,000. Henry C. Jones, Engr.; Emerson McMillian & Co., Wall St., New York, are the financial backers. H. M. Hobbie and J. C. Haas are interested.

NEW ORLEANS, LA.—The Western Electric Co., Chicago, has the contract for the machinery for the new power house for the Merchants' Electric Light & Power Co. The boilers will be of 1,500 HP. There will be two Stanley generators of 600 HP. each and one of 300 HP.

DURANT, MISS.—W. H. Mullen, Cy. Clk., writes to us that the city will soon sell $10,000 in bonds for a plant.

MEMPHIS, TENN.—The question of the better lighting of the recently annexed suburbs is being considered by the council.

GUTHRIE, KY.—The question of building a plant is reported as being considered.

CINCINNATI, O.—Press reports state that the following bids were received by the treasury department, Washington, D. C., June 20, for a plant for the post-office building here: Western Electric Co., Chicago, horizontal engines, $6,600; vertical, $7,642; generators, $3,183; switchboard and wiring, $9,975; work complete with horizontal engines, $19,000; coupled with vertical engines, $20,000; Jenney Electric Mfg. Co., Indianapolis, three generators, $3,145; Westinghouse, Church, Kerr & Co., New York, three engines and foundations, $7,281; Ames Iron Works, Oswego, N. Y., horizontal engines, $6,360, does not include steam exhaust and drip connections; Ridgeway (Pa.) Dynamo & Engine Co., three engines, three generators and foundations, $7,350 and $8,050; three generators, $3,600 and $4,125; three engines, $4,200 and $4,375; Thresher Electric Co., Dayton, generators, $3,150; engines and generators, $9,800; with Ball engines, $10,850; Triumph Electric Co., Cincinnati, generators, $3,425; Devere Electric Co., 430 Pearl St., Cincinnati, switchboard and wiring, $10,500; General Electric Co., Schenectady, generators, bidders' specifications, $3,050; government specifications, $3,200; Crocker-Wheeler Co., generators, $3,631; J. F. Buchanan & Co., switchboard and wiring, $9,760; Electric Appliance Co., Cincinnati, switchboard and wiring, $18,175; Westinghouse Electric & Mfg. Co., Washington, D. C., $3,382, generators; Siemens & Halske Electric Co., Chicago, generators, $3,270; Eddy Electric Mfg. Co., Windsor, Conn., 4 generators, $5,175 and $5,795; A. S. Schulman, 41 Perrin Bldg., Cincinnati, switchboard and wiring, $16,419.

CHICAGO, ILL.—The drainage board has decided to ask for bids, to be opened within 60 days, for utilizing the water power of the drainage channel at Hickory Creek and Lockport.—Ex-Alderman E. W. Sproul has been awarded the contract at $12,409 for constructing the Robt. A. Waller plant at 63d St. and Wentworth Ave., for the city. The following bids were received for the two smokestacks for this new plant: Jno. T. Muldoon, building, $7,937; smokestacks, $8,138 each; Congress Construction Co., $7,527, $9,800; Leafgreen Bros., $7,568, $6,589; Geo. B. Swift Co., $8,412, $7,090; W. H. Mortimer, $7,684, $6,800; E. W. Sproul, $6,883, $4,928; A. Marchmont, $7,200, $7,380 (second stack, $7,480); McEwen Bldg. Co., $7,999, $6,100; Henry W. Schuelter, $7,645; $6,500; Jacob Furst & Sons (cut stone only), $598, $1,985; Henne & Co. (cut stone), $650, $1,889.

CHICAGO, ILL.—Bids are asked until July 7 for furnishing steam piping and a condenser for the electric plant at 289 South Halsted St. E. B. Ellicott, Cy. Elec.

DECATUR, ILL.—John Allen writes us that the city has not yet seen fit to grant a franchise for a plant.

ROCKFORD, ILL.—The local papers state that the electric plant and street railway will be combined by the Rockford Edison Co., recently incorporated with a capital stock of $350,000. A number of improvements and extensions will be made.

ELROY, WIS.—This place voted June 16 to issue $10,000 in 5% bonds for a plant.

MILWAUKEE, WIS.—The following bids were received June 17 for a plant for the court house; A. M. Patitz, Engr., Pabst Bldg.: Wegner Bros., heating plant, $5,250, high pressure power, $4,455; L. J. Mueller Furnace Co., steam heating and electrical machinery, $10,987; Chas. B. Krause Heating Co., heat and light plant, $16,648, except electric plant and wiring, $13,248; H. Mooers Co., heating plant, except engines, $8,925; Julius Andrae & Sons Co., electrical work with engines, $6,969; If Ball or Ideal engines, $7,568; overhead lines to jail and morgue, additional, $871; underground lines to jail and morgue, additional, $4,243.

FALLS CITY, NEB.—M. N. Bair, Cy. Engr., writes us that the contract for a 90-K-W. generator has been let to the General Electric Co., at $1,497, and that for a 700-HP. engine to the Murray Iron Works, Burlington, Ia., at $1,700.

HASTINGS, NEB.—Propositions to put in a plant to light the town were received June 13 from W. D. Connoy, Denver, Colo.; the Guthrie Electric Light Co., Guthrie, Okla.; New Electric Light Co., Guthrie, and the Seckner Contracting Co., Chicago.

GRAND FORKS, N. DAK.—Bids are asked until July 6 for furnishing two dynamos and a plant of 800 lights capacity for the State University buildings. Jos. Kennedy, Secy. Bd. Trustees.

COFFEYVILLE, KAN.—The contract for building a plant, it is stated, will be let about July 20; estimated cost, $17,000. E. E. Nelson, Chn. Com.; Owen Ford, Engr., Security Bldg., St. Louis, Mo.

JOPLIN, MO.—Bids were received June 27 for constructing a city plant to cost $6,000. L. A. Hunter, Arch., Joplin, Mo.

MACON, MO.—C. D. Sharp, Chn. Com., writes us that the city will possibly want this summer two boilers for the plant.

STILLWATER, OKLA.—Abercrombie & Miller have been granted a franchise for a plant, according to reports.

LOS ANGELES, CAL.—C. H. Hance, Cy. Clk., writes us that the proposition for the city to purchase the system of poles, wires and lamps for street lighting has not been definitely determined upon. A bond issue of $160,000 will have to be authorized at a special election. If the election is called and the bonds issued the system will be constructed by the San Gabriel Electric Co. of this city. The system will not include generating plant.

ORANGE, CAL.—Bids are asked until July 10 for the purchase of a 50-year franchise for furnishing power. H. Z. Adams, Cy. Clk.

REDLANDS, CAL.—The Lytle Creek Light & Power Co. will hold a meeting Sept. 5 to consider the question of issuing $300,000 for a new plant. F. G. Feraud, Secy.

UKIAH, CAL.—This place on June 20 voted to issue bonds for a municipal plant, according to reports.

MONTREAL, QUE.—The Lachine Rapids Land & Hydraulic Co. proposes to build a dam 1,000 ft. long. Lea Walbank, Mgr.

GRIMSBY, ENGLAND.—Bids are asked until July 10 for furnishing the machinery for a plant. A. B. W. Kennedy, Engr., 17 Victoria St., Westminster, London, S. W.; Marshall Petree, Town Surv.

NEW COMPANIES.—Marlborough Electric Light, Heat & Power Co., Marlborough, N. H.; $5,000; E. B. Knowlton, C. Hodgkins, C. O. Whitney.

Merchants' Electric Light & Power Co., New Jersey Registration & Trust Co.'s Bldg., East Orange, N. J.; $120,000; Walter Ross, E. C. Dyer, Coshocton, O.

Milling Power & Light Co., Yankton, S. Dak., $20,000; Wm. J. Pugh, Mucatine, Ia.; Jas. L. Welo, Yankton.

Union Electric Co., Portland, Me.; Chas. E. Bailey, Portland; J. K. P. Rogers, South Portland, Me.

International Electric Mining Co., Portland, Me.; Harry L. Cram, Clarence Hale.

Valley Junction Water & Light Co., Valley Junction, Ia.; $35,000; J. H. Brown, Geo. Mayer, of the Seckner Contracting Co., Chicago.

Rogersville Electric Co., Rogersville, Tenn.; $5,000; C. C. Cochran, A. B. Rogan, S. Webster.

BRIDGES.

BEMIS, MASS.—The following bids for the construction of a bridge to abut the Newton bridge over Charles River have been received: R. D. Shannahan, $6,300; Ross & Fowler, $6,350; Norcross Brothers, $7,742; Holbrook, Cabot & Daly, 7,780; A. B. Murdough, $8,592; Trumbull & Co., $10,741; Harries & Letteney, $17,900.

WESTFIELD, MASS.—Reports state that the Woronoco St. Ry. Co. has let a contract for building the line, which includes three new bridges, to Fred. T. Ley & Co., of Springfield, at $56,000.

IRONDEQUOIT, N. Y.—Reports state that resolutions have been introduced providing for the construction of a bridge between the villages of Charlotte and Summerville.

CAMDEN, N. J.—Bids are asked until July 12 for the construction of a 40-ft. span steel highway bridge over Pensauken Creek, as stated in our advertising columns. J. J. Albertson, County Engr.

READING, PA.—It is stated that a resolution has been passed directing the chief highway commissioners to consult with the officials of the Philadelphia & Reading Ry. Co. for the selection of a site for a bridge connecting the 13th and 14th Wards.

BALTIMORE, MD.—It is reported that the contract for constructing the bridge on Wilkins Ave. has been let to the Wrought Iron Bridge Co., of Canton, O.

WASHINGTON, D. C.—Reports state that bids will be asked by Acting Secretary Meiklejohn and Gen. J. M. Wilson, Chief of Engineers, for the memorial bridge over Potomac River, connecting the observatory grounds with Arlington. Congress has appropriated $5,000 for plans, and it is intended to purchase the three best designs and specifications, awarding $1,800 for the first, $1,200 for the second and $1,000 for the third.

WASHINGTON, D. C.—Col. Chas. J. Allen, Corps of Engineers, has awarded the contract for repairing pier number 4 of the aqueduct bridge over the Potomac River to the Central Contracting Co., of New York, at $37,747.

THOMASTON, GA.—Bids are asked by the county commissioners until July 4 for the erection of an open truss bridge, 14 ft. wide, and rest on two stone pillars; also for a steel bridge at same place, span to be 60 ft. long. M. H. Sandwich, Clk.

ANDALUSIA, ALA.—Bids are asked until Aug. 14 for the construction of a bridge over the Conecuh River, according to reports. Address H. B. O'Neal.

MOBILE, ALA.—Press reports state that the following bids for the construction of a steel bridge over Three-Mile Creek were received June 13: Virginia Iron & Bridge Co., $4,949; Central Bridge & Iron Works, $4,-965; Hasle & Young, $3,875; Sullivan Bridge Co., $4,010; Indiana Bridge Co., $3,855; Geo. E. King Bridge Co., $3,892; King Bridge Co., $3,693; Youngstown Bridge Co., $4,275; Hayes & Pulliam, $5,100.

LOCKPORT, LA.—Bids are asked by the Southern Bridge & Construction Co., of Houston, Tex., until July 10 for a brick pivot pier and protection piling for the steel bridge being constructed here, according to reports.

CHARLESTON, TENN.—Bids are asked until July 1 for the construction of a steel span and stone piers for a bridge across Moose Creek. H. H. Knox, Chn. Com.

COVINGTON, KY.—Bids are asked until July 6 for the construction of a steel bridge over Banklick Creek at Bristow's crossing. M. T. Shine, County Judge.

BIRMINGHAM, O.—Frank Chandler, Town Clk., writes us that the proposed new $16,000 bridge across the Vermilion River, will not be built this summer; either the cost must be reduced or the question of issuing bonds submitted to the voters.

GRAND RAPIDS, O.—It is stated that the Osgood Civil Engineering Co. has been asked by the county commissioners to prepare plans and specifications for a bridge at this place.

YOUNGSTOWN, O.—Bids are asked by the county auditor until July 10 for $25,000 of bonds, for building the Market St. bridge across the Mahoning River.

EVANSVILLE, IND.—Louis H. Legler, County Audr., informs us that the following bids were received June 22 for the construction of ten steel bridges: Canton Bridge Co., $9,999; Indianapolis Bridge Co., $9,700; W. A. Braden, $9,567; New Columbus Bridge Co., $9,747; Massillon Bridge Co., $9,250 (awarded); Brackett Bridge Co., $9,998.

GREENFIELD, IND.—Bids are asked by the county commissioners until July 7 for the construction of a bridge in New Palestine, across Sugar Creek.

GREENS FORK, IND.—Bids are asked by the commissioners of Wayne and Randolph counties until July 8 for the construction of a steel bridge, 110 ft. long.

ROCKVILLE, IND.—Bids are asked by the board of commissioners of Parke county until July 5 for the construction of two wagon bridges; length of spans, 110 and 70 ft. S. A. Pike, County Audr.

VINCENNES, IND.—Bids are asked until July 10 for about $7,000 worth of county bridge work, according to reports. J. S. Spiker, Engr.

ALBION, MICH.—Bids are asked by the board of public works until July 7 for the construction of a low truss steel bridge of 65 ft. clear span, 20 ft. roadway, and two foot-walks. Harlan K. Whitney, Engr. of Sewers, Battle Creek, Mich.

BEMENT, ILL.—Bids are asked until July 8 for the construction of a 75x16-ft. steel highway bridge. Harvey Fay, Town Clk.

EARLVILLE, ILL.—Bids are asked until 2 p. m. June 20 for the construction of a 64-ft. span iron bridge. H. N. Chase, Town Clk.

URBANA, ILL.—Bids are asked until July 11 for the construction of four steel highway bridges. Ira O. Baker, Champaign, Ill.

WINDHAM, MINN.—Bids are asked by the county commissioners until July 13 for the construction of an 80-ft. steel bridge over the Des Moines River, according to reports. J. S. Kibbey, County Treas.

GENOA, NEB.—We are informed that the Canton Bridge Co., of Canton, O., has been awarded the contract for the construction of a steel bridge, at $1,192.

WASHBURN, N. DAK.—Bids are asked until July 3 for the construction of bridges over Turtle and Douglas Creeks; also for stone abutments to two bridges, according to reports. Aug. E. Johnson, County Audr.

STURGIS, S. DAK.—Bids are asked until July 10 for the construction of a bridge across Belle Fourche River, according to reports. W. A. McMichael, County Audr.

ELDORADO, KAN.—Bids are asked by the commissioners of Butler county until July 7 for the construction of a 14-ft. stone arch bridge over Slough River, according to reports. J. C. Smith may be addressed.

WELLINGTON, KAN.—Bids are asked until July 20 for the construction of an iron bridge. W. E. Wood.

CARROLLTON, MO.—Bids are asked until July 3 for the construction of a bridge of two spans, one 24 ft. and the other 40 ft. long, over Branch River, according to reports. Charles Finch, Borough Clk.

CHILLICOTHE, MO.—Press reports state that a $3,500 bridge will be erected across the Grand River in Ridge township.

ELLENSBURG, WASH.—Bids are asked until July 6 for a combination or Howe truss highway bridge across the Yakima River, according to reports. Simon P. Fogarty, County Audr.

NOVELTY, WASH.—The following bids were received June 16 for the construction of a steel bridge over the Snoqualmie River at this place: Puget Sound Dredging Co., Seattle, $8,480; California Bridge & Construction Co., San Francisco, $8,740, including approaches; Savage & Schofield, Olympia, $8,950; Northwest Bridge Co., Tacoma, $9,200; Pacific Bridge Co., San Francisco, $9,950; Seattle Bridge Co., $10,569; Fox & Austin, $14,130.

LOS ANGELES, CAL.—Reports state that the council will soon re-advertise for bids for the construction of the Los Feliz, Arroyo, Seco and North St. bridges.

VISALIA, CAL.—Bids are asked by the board of supervisors until July 18 for constructing a bridge on Tule River in First Supervisor District. John Cutler, Jr., Clk.

BRANT, ONT.—Bids are asked until July 3 for the construction of a steel or combination bridge over the Saugeen River; span 150 ft., roadway 14 ft. Jas. Warren, Engr., Walkerton, Ont.

BUILDINGS.

BURLINGTON, VT.—Dennison & Dwyer, Albany, N. Y., have been awarded the contract for the erection of barracks and storehouses at Fort Ethan Allen, Burlington; estimated cost, $75,000.

BOSTON, MASS.—Bids are asked by the bath committee, 64 Pemberton Square, until June 30, for erecting a public convenience station; bond, $5,000. T. J. Lane, Chn.——Bids are asked by the pauper institutions trustees of this city until June 30 for erecting new power houses, Long Island, Boston Harbor, bond, $15,000; also for furnishing new pumps, heaters, boilers, etc., bond, $9,-000. W. T. Sedgwick, 28 Court Square.

NEW BEDFORD, MASS.—Bids are asked by the trustees of the Union Baptist Church until July 1 for erecting a new church building at Court and Cedar Sts. Address J. E. Reed, 5 Purchase St.; Nat. C. Smith, Arch., Merchants' Bank Bldg.

NEWPORT, R. I.—Bids are asked until July 26 for erecting a hospital building at Fort Adams; also separate bids for heating, gas-piping and plumbing. E. W. Hubbard, Q. M.

SOUTH NORWALK, CONN.—Bids are asked until July 5 for the reconstruction of Trinity Church building. S. C. Palmer, Chn. Bldg. Com.; Wm. S. Knapp, Arch.

ALEXANDRIA BAY, N. Y.—Bids are asked until July 4 for erecting nine pavilions on State property on the St. Lawrence River, near Alexandria Bay and Clayton. Address, Williams & Johnston, Archs., Ogdensburg, N. Y.

BROOKLYN, N. Y.—The Hanson Place Baptist Church has decided to erect a new church building to replace the present structure at Hanson Place and South Portland Ave.; estimated cost, $200,000. A. C. Dixon, Pastor,—— The St. Paul's P. E. Church is reported to have accepted plans for a new church building to be erected at St. Paul's Place and St. Paul's Court, to cost about $45,000. T. G. Jackson, Pastor.——F. E. Smith, 193a Schaeffer St., proposes to erect four 4-story brick and stone flat buildings on Flatbush Ave., to cost $96,000. A. E. Funk, Arch., 1561 Broadway, Brooklyn.

BROOKLYN, N. Y.—Wm. H. Reynolds will build 11 3-story brick and stone dwellings on Sterling Place, near Vanderbilt Ave., to cost $88,888. Benjamin Driesler, Arch., 1432 Flatbush Ave.

BROOKLYN, N. Y.—We are informed that the following bids were received by the bureau of yards and docks, Washington, D. C., June 24, for a pattern shop for the navy yard in this city: Mapes-Reeves Construction Co., Brooklyn, $46,000; John Thatcher, Brooklyn, $38,980; P. J. Carlin & Co., Brooklyn, $51,608; Ryan & McFerran, New York, $45,465; Augustin Smith, New York, $40,724; Herman Probst, New York, $46,500; W. G. Triest, New York, $37,326.——Also for an oil and varnish house, to be erected at the navy yard; (1), (2) and (3) are different items: Mapes-Reeves Construction Co., Brooklyn, (1) $58,700, (3) $1,325; P. J. Carlin & Co., Brooklyn, (1) $55,-842, (2) $2,047, (3) $1,107; John Thatcher, Brooklyn, (1) $58,529, (2) $2,600, (3) $1,400; Ryan & McFerran, New York, (1) $65,000, (2) $2,800; Augustin Smith, New York, (1) $60,721, (2) $2,000; Herman Probst, New York, (1) $64,400, (2) $2,800, (3) $1,400; W. G. Triest, New York, (1) $51,526, (2) $2,200, (3) $1,200; L. W. Seaman & Son, Brooklyn, (1) $61,000, (2) $2,730; McLain & McCann, New York, (1) $59,518, (2) $2,394.

LOWVILLE, N. Y.—Thomas McHale, Lowville, is reported to have been awarded the contract for erecting a town hall at this place, at $13,500, including the plumbing.

NEW YORK, N. Y.—Bids are asked until July 5 for repairing two dormitories and the power house, and for laundry and disinfecting apparatus and plumbing work on Hoffman Island, and for a range, refrigerator and tank at Swinburne Island, New York Harbor. Dr. E. J. Palmer, Pres. State Bd. of Comrs. of Quarantine, 11 Broadway; G. L. Heins, State Arch., Albany, N. Y.——The new custom house building to be erected at State, Bridge and Whitehall Sts. and Bowling Green, will be six stories high and cover an area of 64,000 sq. ft. Specifications have just been issued to about 25 architects, who will prepare competitive plans. James Knox Taylor, Supervising Architect, Washington, D. C.——Plans have been filed by Wolf Reiss, 715 Broadway, Brooklyn, for four 5-story brick flat and store buildings on 1st Ave., near 91st St., to cost $100,000. Rudolph Werner, Arch., 1825 Vanderbilt Ave.; by L. F. J. Weiher, Jr., owner and Arch., for 17 2-story brick dwellings on Washington Ave., near 164th St., to cost $127,500; by Mrs. R. Winesimmes, 782 East 173d St., for four 5-story brick flat buildings on 118th st., near Madison Ave., to cost $108,000. Schneider & Herter, Archs.; by Ernest Wetterer, 212 West 105th St., for three 6-story brick flat and store buildings on 132d St., near Amsterdam Ave., to cost $75,000. F. T. Camp, Arch., 15 Park Row; by Henry Corn, 987 Madison Ave., for a 10-story brick store and loft building at 122 and 124 5th Ave., to cost $550,000. Robert Maynicke, Arch., 225 Broadway; by I. Mayer, 59 West 115th St., for three 5-story brick flat buildings on 98th St., near Madison Ave., to cost, $75,000. John Hauser, Arch., 1441 3d Ave.; by J. T. Barry, 1149 Boston Ave., for five 4-story brick flat buildings at 168th St. and Fulton Ave., to cost $116,000. Edward Wenz, Arch.; by Smith & Roffler, 62 East 87th St., for a 7-story brick flat and store building at 101st St. and Broadway, to cost $125,000. Neville & Bagge, Archs., 217 West 125th St.; by Israel Stone, for a 7-story brick flat building at 126th St. and Lexington Ave., to cost $110,000. Chas. L. Angell, Arch., 108 Fulton St.; by Judson Kilpatrick, for a 6-story brick and stone flat building on 97th st. near West End Ave., to cost $85,000. James & Leo. Ambs., 2585 Broadway; by Leopold Kaufman, 1838 2d Ave., for five 6-story brick flat buildings at 3d Ave. and L. St., to cost $135,000. Schneider & Herter, Archs., Bibliography by Fay & Stacom, 337 Pleasant Ave., for two 6-story brick flat and store buildings at 442 to 446 East 10th St., cost $100,000. Charles Rentz, Arch., 153 4th Ave.

TRENTON, N. J.—Geo. E. Poole, Jr., Prudential Bldg., Newark, N. J., has been selected by the state house commission to prepare plans for the enlargement of the Capitol. Estimates will be presented to next legislature.

ALLEGHENY, PA.—W. G. S. Hastings has been awarded the contract for erecting an engine house in the 19th Ward, at $11,500.——T. E. Billquist, Stevenson Building, has been chosen to prepare plans for the new Allegheny Observatory, to be erected opposite River View Park. Construction is to begin in August.

NEW BRIGHTON, PA.—A site has been accepted on 10th St., between 3d and 4th Aves., for the new U. S. building to be erected here at a total cost of $75,000.

PHILADELPHIA, PA.—Plans have been prepared for a 7-story building to be erected at 6th and Arch Sts., for the Curtis Publishing Co., to cost $125,000. Peabody & Stearns, Archs., 53 State St., Boston, Mass.; Lewis Havens, Contractor.——Estimates are being received by Cope & Stewardson, Archs., according to reports, for erecting the new dormitory building, 100x48 ft. for Haverford College.——The following bids were received by the director of public works, June 19, according to reports, for erecting a police and fire station at 7th and Carpenter Sts: Wm. H. Dougherty, 1604 Sansom St., $47,900; Thos. M. Seeds, Jr., 1216 Race St., $47,733; Macey, Henderson & Co., 1216 Filbert St., $45,643; J. E. & A. L. Pennock, 305 Walnut St., $45,474.

PHILADELPHIA, PA.—Bids are asked by the board of education, 713 Filbert St., until June 30, at 2:30 P. M. for erecting a 27-division school building at 8th and Fitzwater Sts., a 15-division school building at 54th St. and Lansdowne Ave., etc. A. F. Hammond, Secy. Com.

LAUREL, DEL.—A fire in this town, June 24, destroyed a number of the principal buildings; estimated loss, $200,000; insurance, $20,000.

BALTIMORE, MD.—O'Neill & Co. have been granted a permit to erect a 6-story brick, stone and iron building at Charles and Lexington Sts., to cost $63,000.

SNOWHILL, MD.—Bids are asked until July 1 for erecting a brick Methodist Episcopal church building at this place. S. M. Morgan, Pastor.

NEWPORT NEWS, VA.—A. C. Houston, Richmond, Va., is reported to have received the contract for erecting a $75,000 opera house here. M. J. Dimmock, Arch., 1111 East Main St., Richmond.

PORT ROYAL, S. C.—The following bids were received by the department of yards and docks, Washington, D. C., June 17, for constructing a repair shop for steam engineering at the naval station, Port Royal: McIlvain-Unkerfer Co., Pittsburg, Pa., $59,950; Miles & Bradt, Atlanta, Ga., $44,500 and $46,500; T. A. Brown, Augusta, Ga., $51,200; Penn Bridge Co., Beaver Falls, Pa., $47,835.

BLUE RIDGE, GA.—Bids are asked until July 15 for erecting a 2-story court house for Fannin county at this place; deposit, $500. Thos. J. Wilson, Ordinary; A. J. Bryan, & Co., Archs., 444 Equitable Bldg., Atlanta, Ga.

ELLAVILLE, GA.—Plans and specifications are asked by the commissioners of Schley county, until July 1, for a brick court house, to cost about $10,000. W. D. Murray, Secy.

JACKSONVILLE, FLA.—S. S. Leonard is reported to have been awarded the contract for erecting a 2-story Catholic convent in this city, to cost $24,778.

NASHVILLE, TENN.—Plans have been prepared for the enlargement of the Davidson county court house; estimated cost, $58,000. Robert Sharp, Arch., 21 Cole Bldg., Nashville.

NEWPORT, KY.—The following bids were received by the supervising architect, Washington, D. C., June 14 for the construction (except heating apparatus, electric wiring and conduits) of the U. S. building at Newport: Anderson Construction Co., St. Louis, Mo., $79,000; L. L. Leach & Son, Chicago, Ill., $69,500; Lewis D. Beman, Cincinnati, O., $52,000; McIlvain-Unkerfer Co., Pittsburg, Pa., $69,-785; time 12 months.

ELLISTON, O.—Bids are asked until July 6 for constructing a new school building at Elliston, District No. 1, Benton township, Ottawa county. M. Heuman, Clk., Rocky Ridge, O.

LIMA, O.—Bids are asked by the board of education until July 12 for erecting a 16-room brick school building on East High St. Asa Catt, Clk.

LOMBARDSVILLE, O.—Bids are asked until July 28 for erecting a school building for Union township. C. Lombard, Clk of Bd.

MANSFIELD, O.—Bids are asked until July 6 for improving the Hedges Street School building. Wm. E. Fulton, Pres. Bd. of Education.

MINSTER, O.—Bids are asked by the board of education until July 17 for a steam heating apparatus for the public school building; bond, $1,000. Wm. Nienberg, Clk.

TOLEDO, O.—Plans have been accepted for a new church building, 95x123 ft., for the Collingwood Ave. Presbyterian Church. J. O. Hill, Bldg. Com.; Yost & Packard, Archs., Columbus, O.

TOLEDO, O.—A fire in this city June 26 destroyed the freight house of the Michigan Central Ry., and damaged the Cincinnati, Hamilton & Dayton Co.'s freight house; estimated total loss, $300,000.

PORTLAND, IND.—Bids are asked by the commissioners of Jay county until July 18 for constructing a jail building in Portland. The appropriation is for $20,000.

CHICAGO, ILL.—Plans have been prepared, according to reports, for a cold storage warehouse, to be erected on Michigan St., for Fred. Espert, at a cost of about $70,000. F. Ahlschlager, Arch., 70 La Salle St.——Building permits have been granted to Batsford & McReynolds for an elevator to be erected at 106th St. and Calumet Ave., to cost $255,000; and to the Western Electric Co., for an 8-story brick storage building, at 254 to 258 South Jefferson St., to cost $100,000.

DANVILLE, ILL.—Bids are asked until July 5 for installing a heating and ventilating apparatus, plumbing apparatus, and gas piping; electric lighting apparatus, etc., in three buildings at the branch of the National Home for D. V. S. W. C. Gunnell, Engr., Danville.——J. E. Bryan, Secy. of School Bd., has been instructed to advertise for bids for the steam heating of the Washington School building, as soon as the plans for same have been approved.

RUSH, ILL.—Bids are asked until July 3 for erecting a town hall for Rush township. James H. Vick, Town Clk.

DES MOINES, IA.—The Capitol City Brick & Tile Co. is reported to have been awarded the contract for building the foundation of the new library building, at $20,-937, and E. W. Crellin, Des Moines, for the iron work, at

$11,945. Minnesota Sandstone Co., Minneapolis, Minn., will furnish Kettle River building stone at $41,944.

WINTON, IA.—An election will be held in Benton county July 18 to vote upon the proposition of erecting a new $75,000 court house.

HALLOCK, MINN.—Bids are asked until July 10 for heating the court house and jail in this city. W. F. Kelso, Chn. County Comrs.

MINNEAPOLIS, MINN.—The Graver Tank Works, Chicago, is said to have the general contract for constructing a steel elevator for the United States Milling Co., on 26th Ave., N. E.; estimated cost, $60,000.

WALKER, MINN.—Bids are asked by the office of Indian affairs, Washington, D. C., until July 18 for erecting 12 buildings at the Leech Lake Indian Agency. Capt. W. A. Mercer, U. S. Indian Agent, Walker.

LOUP CITY, NEB.—Bids are asked until July 5 for erecting a 6-room school building in this city. C. F. Johnson, Director; I. J. Hicks, Arch., Omaha, Neb.

UNIONVILLE, MO.—An election will soon be held in Putnam county to vote upon the proposition of constructing a $30,000 court house.

LITTLE ROCK, ARK.—Bids are asked until July 1 for constructing an infirmary building for the State Lunatic Asylum. S. P. Turner, Secy. Bd of Trustees, State Charitable Institutions; F. W. Gibb, Arch., Reider Bldg.

MANHATTAN, ARK.—Bids are asked until July 10 for erecting an extension to the shops of the Kansas State Agricultural College, and an extension to the boiler house. E. T. Fairchild, Pres. Bd. of Regents.

EL PASO, TEX.—B. S. Catlin, Cy. Clk., informs us that this city has just finished a fire department headquarters building, and a recorder's court and jail building, and work is now in progress upon a city hall building, which is half completed. Contracts have also been let for erecting three new school buildings.

SEATTLE, WASH.—E. A. MacKay, Seattle, is reported to have been awarded the contract for erecting new army barracks, etc., at Marrowstone Point, at $46,832. Other bidders were: Gribble & Duhamel, $59,933; Carkeep & Cawsey, $56,801; Nichols & Crothers, $54,590; John McGrath, $55,525; California Bridge & Construction Co., San Francisco, $68,917.

CHEMAWA, ORE.—Thos. W. Potter, Supt., informs us that he expects to advertise for bids for a new steam heating and electric lighting plant for the school building at Chemawa about Sept. 1.

LOS ANGELES, CAL.—An election will soon be held in this city to vote upon the proposition of issuing $418,000 in bonds for new school buildings, and $100,000 in bonds for a municipal lighting system.

SAN FRANCISCO, CAL.—Plans have been prepared by Chas. R. Wilson, according to reports, for a 4-story hotel building for workingmen to contain 800 rooms; estimated cost, $150,000.——The following bids were received by the supervising architect, Washington, D. C., June 22, for repairs to stone work, etc., of the U. S. branch mint at San Francisco; all local bidders: J. H. McKay, $39,700, 6½ mos.; McPhee Co., $31,035, 152 days; Smott & Co., $42,900, 9 mos.

WADSWORTH, NEV.—Bids are asked by the office of Indian affairs, Washington, D. C., until July 20 for constructing a dormitory and an employees' quarters at the Pyramid Lake School. Fred E. Spriggs, U. S. Indian Agt., Wadsworth.

WATER-WORKS.

CHESHIRE, MASS.—C. F. Sayles, Adams, Mass., has been engaged to prepare plans for an additional water supply for the Cheshire Water Co.

STONEHAM, MASS.—Bids are asked by the Metropolitan Water Board, Boston, July 17 for improving Spot Pond, as stated in our advertising columns.

ANGOLA, N. Y.—The town has granted a franchise to Dr. F. P. Van Denbergh, Erie County Bank Bldg., Buffalo, N. Y., for works. Chas. Morris, Town Clk.

AVON, N. Y.—Superintendent Sackett, of the works, writes us that the question of improving the works is still being considered. It is probable that if the improvement is made, about 1½ miles of 12-in. wooden pipe will be needed.

FISHKILL LANDING, N. Y.—H. E. Allison, Medical Supt. Mattawan State Hospital, informs us that the following bids were received June 21 for a pumping engine, standpipe, etc., at the State Hospital. The contract was not let as the bids exceeded the appropriation: (1) being for pump of 100,000 gallons per 10 hours; (2) for pipe line 3,500 ft.; (3) for standpipe, 15 x 85 ft.: Barr Pumping Engine Co., Philadelphia, (1) $957; W. J. Walsh, Holyoke, Mass., (3) $4,000, wooden roof, without foundation or pipe laying; Knowles Steam Pump Works, New York, (1) $566 and $670, no foundation, and f. o. b. Fishkill; Artesian Well Drilling Co., 44 Centre St., New York, (2) $5,950; (3) $6,970; John Redman, Fishkill-on-Hudson, (2) $7,697, Henry R. Worthington, New York, (1) $1,150; P. P. O'Hehis, Warwick, N. Y., (2) $5,859; F. G. Wood, Newburg, N. Y., (2) $5,725; Delaney & Co., Newburg, (3) $5,850; John Morrell, Mohawk, N. Y., (2) $6,510; Tippitt & Wood, Phillipsburg, N. J., (3) $400 for pipe connections, $200 for superintendence of foundation; complete without foundation, roof or doors, $4,700; complete, $5,670; Erbeck Bros., Homestead, Pa., (1) $1,550; (2) $5,198; (3) $6,667; Stewart M. Neff, 120 Liberty St., New York, (1) $1,200; (2) $5,600; (3) $6,000.

ROCHESTER, N. Y.—The following bids were received by the water board June 12 for furnishing water pipe for Caledonia Ave. and Elizabeth St.: United States Cast Iron Pipe Co., Buffalo (accepted), $21,737; Warren Foundry & Machine Co., New York, $22,282; R. D. Wood & Co., Philadelphia, $25,301; Utica Pipe Foundry Co., part of the material, $13,237.

SINCLAIRVILLE, N. Y.—A. P. Chessman, Pres., writes us that no steps have yet been taken to secure the works recently voted to purchase.

SYRACUSE, N. Y.—Bids are asked until July 8 for furnishing 415 tons of pipe and 20,000 lbs. of special castings, as stated in our advertising columns. W. R. Hill, Engr. Water Bd.

TUPPER LAKE, N. Y.—Bids are asked until July 1 for constructing works for the Tupper Lake Water Co. Address Jas. L. Jacobs.

HAMMONTON, N. J.—The Hammonton Water Co. has been incorporated with a capital stock of $75,000 by C. D. Jones, Scranton, Pa.; Lorin Montfort, Hammonton; J. F. Crandall, Atlantic City, and others. It is said that the contract for building the works has already been let.

NEWARK, N. J.—The West Jersey Water Co. has been incorporated, at 745 Broad St., Newark, with a capital stock of $100,000, by Francis Jacobs, Montclair Heights, N. J., and Chas. F. Haverin, Newark, N. J.

CARLISLE, PA.—The Taxpayers Water Co. has been incorporated with a capital stock of $1,000, of which $100 is paid in, by Geo. Scott, Pottsville, Pa., Treas.

HARRISBURG, PA.—The question of issuing $75,000 in bonds for a new 12,000,000-gallon pump, will probably be voted upon at the election in November.

FREEPORT, PA.—This place voted June 21 to issue bonds for municipal works.

LANESBORO, PA.—The Lanesboro Water Co., has been incorporated, with a capital stock of $10,000, of which $1,000 is paid in, by John B. Shannon, Geo. E. Giles, Carbondale, Pa., and others.

YOE, PA.—The Yoe Water Co. has been incorporated with a capital stock of $10,000, by G. U. H. Kohler, Moses Snyder and B. S. Taylor.

BALTIMORE, MD.—S. G. Brosius, Consult. and Supervising Engr., of the water department, has submitted his annual report to Maj. Wm. L. Kenly, Ch. Engr., in which he says new mains will be required in a number of streets, besides other improvements.

FROSTBURG, MD.—Bids are asked by the Water Committee until July 3 for sinking a 5⅝-in. well 300, 600, 900 or 1,200 ft., according to reports.

TACOMA PASK, D. C.—An election will be held July 3 to vote on the question of issuing $40,000 in bonds for works. H. J. Long and W. C. Platt are on the committee.

STAUNTON, VA.—C. H. Harrison, Cy. Engr., writes us that the council contemplates adding to the water supply, and that he has been engaged to make surveys for a gravity supply.

MONTGOMERY, W. VA.—W. F. Garrettson has been granted a franchise for work, construction on which, it is stated, will be begun at once.

POINT PLEASANT, W. VA.—A 20-year franchise has been granted to the Point Pleasant Water & Light Co.

MONROE, N. C.—Bids are asked until July 20 for furnishing the machinery and for constructing works and an electric plant, as stated in our advertising columns, and also for the purchase of $30,000 of 30-year 4% bonds. Geo. Cadogan Morgan, Engr., Chicago.; Jas. G. Covington, Mayor; S. R. Bunly, Secy.

ROCKINGHAM, N. C.—This place voted June 1 to issue bonds for works. W. N. Everett, Mayor.

WASHINGTON, GA.—Harry Ludlow, Cy. Engr., writes us that the contract for works and an electric plant have been let to R. D. Cole, Newnan, Ga. Bids are wanted for a 10 or 12-in. pipe well for an additional supply.

COLUMBUS, MISS.—Bids are asked until July 20 for constructing works, as stated in our advertising columns. J. L. Ludlow, Engr., Winston, N. C.; W. D. Humphries, Mayor.

BASTROP, LA.—Dan Hiller, Cy. Clk., writes us that bids will probably soon be wanted for building the works; population, 1,000.

McKENZIE, TENN.—The town is considering two propositions to put in works and an electric plant; estimated cost, $20,000. S. C. Hearne, Chn. Com.; J. C. McFall, Secy.

LANCASTER, KY.—Bids will probably soon be wanted for works, according to reports.

BUCYRUS, O.—F. P. Kaler, Supt. Bucyrus Water Co., writes us that plans for a reservoir will be completed at once.

CINCINNATI, O.—Bids are asked until July 14 for the purchase of $1,000,000 of 3% bonds for the new works. Chas. G. Roth, Clk. Bd. Trustees.

KENTON, O.—The question of securing a new water supply will soon be voted upon, according to local papers; estimated cost, $15,000.

VERSAILLES, O.—C. O. Lucas, Greenville, O., has submitted a report on works to cost about $23,000.

WARREN, O.—The Warren Water Co. has let the contract to the Trumbull Mfg. Co. for one pump of 1,000,000 gallons capacity.

YOUNGSTOWN, O.—F. M. Lillie, Cy. Engr., writes us that the trustees have employed F. Herbert Snow, of Boston, Mass., as consulting engineer to investigate the most advisable sources of water supply.

LAPORTE, IND.—C. F. Lefman, Chn. Com., writes us that plans and specifications for extending the works are being prepared by A. T. Maltby, Chicago. The source of the new supply will be four miles from the city.

CHICAGO, ILL.—Bids were received June 26 for removing the present superstructure and the erecting of a new superstructure for the Lake View Crib, situated about six miles north of the mouth of the Chicago River in Lake Michigan. L. E. McGann, Comr. Pub Wks.

FAIRBURY, ILL.—Bids are asked until July 5 for constructing a brick water-works. Fairbanks, Morse & Co., Engrs., Chicago., Ill. S. M. Barnes, Mayor.

ARCADIA, WIS.—The question of building works is reported as being considered.

WEST SUPERIOR, WIS.—Press reports state that the Superior Water, Light & Power Co. is about to begin the construction of its filter to cost about $75,000.

SOLON, IA.—Press reports state that the contract for building works will soon be let.

VALLEY JUNCTION, IA.—An election will be held July 8 to vote on the question of granting a franchise for works and an electric plant.

MORTON, MINN.—Bids are asked until July 1 for constructing works, according to reports. W. W. McGowan, Recdr.

MINOT, N. DAK.—Bids are asked until July 7 for constructing a brick pumping station, extending the mains and removing pump. C. F. Loweth, Engr., 94 East 4th St., St. Paul, Minn.; C. A. Johnston, Mayor.

BOZEMAN, MONT.—Geo. D. Pease, Cy. Clk., writes us that this city will lay this summer about 5,500 ft. of 6-in. cast-iron water pipe, it having already been purchased. Besides the above, about 1,500 ft. of smaller pipe will be laid.

CLAYTON, MO.—The Suburban Water Co. has been incorporated with a capital stock of $25,000 by W. F. Boyle, St. Louis, Mo.; M. B. Greensfelder, Clayton, and others.

MARLIN, TEX.—J. M. Kennedy, Mayor, writes us that the city lacks capital for putting in works, and so will grant a liberal contract to parties who will build. Population, 3,500.

MENA, ARK.—Bids are asked until July 15 for furnishing the materials and for constructing works, as stated in our advertising columns. Plan and specifications are on file at the office of Engineering News, 220 Broadway, New York. S. L. Lindsley, Chn. Com.

ALVA, OKLA.—H. Tisdale, Lawrence, Kan., has been granted a franchise for works, according to reports.

LOS ANGELES, CAL.—Press reports state that the walls of the reservoir in Echo Park will be cemented at a cost of about $25,000. It is probable that the bottom will be cemented later at a cost of about $125,000.

SAN BERNARDINO, CAL.—The Highlands Well Co. has been incorporated with a capital stock of $25,000 by J. B. Tyler, C. L. Frazer and others.

SAN JOSE, CAL.—Bids are asked, until July 3 for furnishing the county with 16,000 ft. of 2, 3 and 4-in. wrought-iron water pipe. P. P. Austin, Chn. Supervisors.

SAN LUIS OBISPO, CAL.—Press reports state that the trustees have rejected the bids for the water and sewer bonds. Their action was due to the decision of Judge Lorrigan declaring the election by which the bonds were voted illegal.

PHOENIX, ARIZ.—Councilman C. J. Dyer writes us that an election will soon be held to vote on the question of issuing bonds for works and a sewerage system. S. A. Davison, Cy. Engr.

MONTREAL, QUE.—The committee wishes to spend about $36,000 in making repairs to the reservoir, putting in meters, etc. Other repairs to cost about $110,000 are proposed.

IRRIGATION

PORTLAND, ORE.—Reports state that the Gold Hill Line Ditch Co. proposes to construct a canal 93 miles long at an estimated cost of $700,000.

RIVERSIDE, CAL.—Reports state that the board of supervisors has given permission to the people of Alessandro Valley to sink a well in the Redlands Boulevard.

NEW COMPANIES.—Graf & Meeker Irrigating Co., Lewellen, Neb.; $15,000; H. E. Graf, A. Meeker.

Fallbrook Water Co., Fallbrook, Cal.; $400,000; F. M. French, of Los Angeles; E. P. Fallis, Rev. Wm. Pittenger, of Fallbrook.

South Mountain Water Co., Redlands, Cal.; $100,000; A. Gregory, C. Putnam, O. A. Worthing.

Jackson County Canal Water Power Co., Salem, Ore.; $100,000; H. L. Gilkey, F. E. Birge, A. F. Hammond.

Plateau Central Reservoir Co., Flagstaff, Ariz.; $300,000; A. T. Cornish, J. W. Cart, E. L. Gale.

NEW COMPANIES.—Freedom & Irrigation Co., Salt Lake City, Utah; $5,012; Benj. Taylor, Pres.

Utah Land & Water Co., Salt Lake City, Utah; $300,000; Ed. Lewis, W. W. Keen, A. Maxwell Shepard.

SEWERAGE.

AUBURN, ME.—The residents of Auburn Heights have asked the Council to build sewers.

WATERBURY, VT.—J. J. Colby, Clk., writes us that this town at a meeting, June 19, voted to build the outlets into the river for a system to cost $5,000. The property owners are to put in pipes to connect whenever they ask for it, they to pay the cost. The entire system will cost $22,000.

CAMBRIDGE, MASS.—The aldermen have engaged Howard A. Carson, Cn. Engr. Boston Transit Comn., Boston, as consulting engineer for the new sewers to cost $400,000. Address Mayor Champlin.

NEWBURYPORT, MASS.—Bids are asked until 1 p. m., June 29, for the materials and for the sewer in Summit St. G. H. Stevens, Cy. Clk.

HARTFORD, CONN.—It is proposed to construct 16,000 ft. of pipe sewer in the Flatbush Ave. district at a cost of $35,000. C. H. Bunce, Cy. Eng.

DEPEW, N. Y.—Bids are asked until July 8 for constructing 17,000 ft. of lateral sewers, as stated in our advertising columns. C. N. Sullivan, Village Clk.

HUDSON, N. Y.—Eugene Elkenlung has been awarded the contract for the North Front St. sewer at $2,205.

LITTLE FALLS, N. Y.—Wm. H. Cookman, Niagara Falls, N. Y., has been awarded the contract for building a sewer in Burnell St., at $3,211, and a sewer in East Main St., at $7,177.

TROY, N. Y.—Bids are asked until July 5 for constructing pipe sewers in certain streets. E. O. Ross, Secy.

NEWARK, N. J.—James Owen, Newark, has submitted estimates for the proposed joint sewer, with the cost to each city as follows: Newark, $30,063.98; South Orange, Township, $37,777; Millburn, $30,730; South Orange Village, $66,875; West Orange, $62,543; Irvington, $48,814. The engineer recommends that provision be made for Summit and a portion of East Orange not included in the scheme. An engineer will probably be consulted in regard to the proposed under drainage system.

WEST HOBOKEN, N. J.—The question of building a main outlet sewer to be used by this place and West New York is being considered; estimated cost, $39,000. Address R. D. Earle, Town Eng., and Mayor Otis, of West New York, and G. B. Bergkam, Chn. Council, West Hoboken.

WASHINGTON, D. C.—Bids are asked by the district commissioners until July 29 for constructing two sections of the East Side intercepting sewers, etc., as stated in our advertising columns.

SALISBURY, N. C.—S. F. Lord, Mayor, writes us that the city proposes to build a system. Population 10,000.

ATLANTA, GA.—It is proposed to construct sewers in certain streets at a cost of about $6,000. W. D. Greene, Cy. Clk.

COLUMBUS, MISS.—Bids are asked until July 20 for furnishing pipe and for constructing sewers, as stated in our advertising columns. J. L. Ludlow, Engr., Winston, N. C.; H. M. Waddell, Cy. Clk.

VICKSBURG, MISS.—It is proposed to construct sewers in certain streets.

CHATTANOOGA, TENN.—It is proposed to extend the Chattanooga Creek sewer 1,650 ft.

KNOXVILLE, TENN.—The residents of West Knoxville have asked the council to extend the lateral sewers.

DAYTON, O.—Bids are asked until July 15 for constructing a system and a sewage disposal plant at the county infirmary. A. G. Feight, County Audr.

EAST LIVERPOOL, O.—Bids are asked until July 6 for constructing six miles of 12 to 4-in. pipe sewers. F. H. Croxall, Secy. Sewer Comn., and until July 10 for the purchase of $35,000 of sewer bonds. J. M. Hanlon, Cy. Clk.; J. A. George, Cy. Engr.

MASSILLON, O.—Bids are asked until July 15 for constructing sewer in West Fremont St. O. C. Volkmor, Clk.

PORTCHESTER, O.—Bids are asked until July 15 for constructing a sewer in Madison St. Geo. F. Meyer, Jr., Clk.

TOLEDO, O.—Bids are asked until July 24 for constructing 54 to 24-in. brick sewers in certain streets, and for paving in two streets. W. O. Holst, Cy. Clk.

ELKHART, IND.—Bids are asked until July 12 for constructing pipe sewers in certain streets. D. F. Corderey, Cy. Engr.

MADISON, IND.—The Public Improvement Committee has decided to build short brick sewers in five streets.

CHICAGO HEIGHTS, ILL.—W. B. Ewing, La Grange, Ill., is preparing plans for a system. P. F. Jutle, Village Clk.

MURPHYSBORO, ILL.—Philip Decker has been granted a 5 years' franchise for a system.

ALBION, MICH.—Bids are asked until July 7 for furnishing the materials and for constructing 1,240 ft. of 10 and 18 in. pipe sewers. H. K. Whitney, Engr. of Sewers, Battle Creek, Mich.

SEYMOUR, IA.—The question of building a system is being considered.

HIBBINGS, MINN.—This place voted June 13 to issue $12,000 in bonds for a system.

ST. PAUL, MINN.—Bids are asked until July 3 for constructing sewers in two streets. C. H. Bronson, Clk.

MERRILL, WIS.—Bids are asked until July 6 for about 3,000 ft. of 28, 24 and 10-in. pipe sewers. B. J. Lambert, Cy. Clk.

WAHPETON, N. DAK.—E. A. Aspinwall, Cy. Audr., writes us that the following bids were received June 17, for constructing brick and pipe sewers: John Klummger & Co., Huron, S. Dak., $29,897; Kennedy & O'Callahan, Des Moines, Ia., $27,438; O'Neil & Son, Faribault, Minn. (accepted), $27,438; E. Eckman & Co., Chicago, Ill., $29,999; Schuler & Co., Wahpeton, N. Dak., $31,450.

BRENHAM, TEX.—The question of building a system is being considered, according to reports. J. A. Wilkins, Mayor.

GALVESTON, TEX.—The arbitrators have submitted their report on the system owned by the Galveston Sewer Co., and value it at $93,000. This ends a long controversy and clears the way for a new system to be built by the city. The city will at once take steps to sell the $300,000 of bonds voted some time ago for this work.

DENVER, COLO.—It is proposed to construct a new sewer in Gilmore at a cost of $4,000.

SEATTLE, WASH.—F. McLellan is reported to have submitted the lowest bid, June 21, at about $35,000, for constructing the East Pine St. sewer.

LINDSAY, ONT.—Bids are asked until June 30 for furnishing materials and for constructing about 2,000 ft. of 12 and 9-in. pipe sewer and a 12-ft. granolithic walk. Geo. Ingle, Clk. Bd. Wks.

LACHINE, QUE.—Dupont & Leduc have completed plans for a system, according to reports.

GARBAGE DISPOSAL—STREET CLEANING

BUFFALO, N. Y.—Bids were received June 22 for removing the ashes and garbage for four years from July 1. The bidders were Richard Forrestel, John Martin & Co., Nachtrieb & Co., Geo. W. Norton, John Johnsen, Daniel Regan, Chas. Mosier, Brown, Stabell & Griffiths, Holch Bros. and Henry P. Burgard. Richard Forrestel bid for the whole work at $6,912 a month; John Martin & Co. bid $7,500 a month; Forrestel bid 20¾ cts. a net ton on garbage and $1.32½ a cu. yd. on ashes, etc., while Martin & Co. bid $1.50 a net ton on garbage and 27 cts. a cu. yd. on ashes, etc. The other bids a month were as follows: Nachtrieb, $8,241; Johnson, $9,350; Mosier, $10,500; Brown, Stabell & Griffiths, $12,000; Holch Bros., $8,877, and Burgard, $14,000.

ERIE, PA.—Kraft & Walther, Erie, have been granted permission to build and operate a plant.

COLUMBUS, O.—Local papers state that Austin & Western, Chicago, have been awarded the contract for ten street-sweepers at $210 each f. o. b. Columbus, and for four 600-gallon street-sprinklers at $251 each, f. o. b. Columbus.

MANSFIELD, O.—The question of a better method of garbage disposal is being considered.

STREETS AND ROADS.

BOSTON, MASS.—Press reports state that the state highway commissioners on June 19 allotted about $450,000 for highways to the various cities and towns of the commonwealth.

QUINCY, MASS.—It is stated that $32,000 has been appropriated for street improvements.

SOUTH FRAMINGHAM, MASS.—It is reported that the contract for the construction of the Franklin St. extension was awarded June 22, to William Lake at $2,690.

WINCHESTER, MASS.—Bids are asked by the county commissioners until July 15 for building the Highland Ave. extension. Levi S. Gould, Chn.

WINTHROP, MASS.—Wm. F. Pierce, Engr. Metropolitan Park Comn., Boston, writes us that Crest Ave., along Winthrop Beach, is to be rebuilt. The work consists of a low sea wall the entire length, building of drive and sidewalks; estimated cost, $100,000.

NEW HAVEN, CONN.—Bids are asked until June 30 for grading County St., near Munson St. C. W. Kelly, Cy. Engr.

BUFFALO, N. Y.—Reports state that the following contracts have been awarded: Barber Asphalt Paving Co., for repaving Summer St., $22,071; American Contracting Co., Court St., $9,250; Henry P. Burgard, Norwood Place, $8,900, and Richmond Ave., $28,475.——The following bids have been received for paving Clare St., from Clinton St. to Olga Place: Asphalt—The German Rock Co., $8,025; Porter ribbed brick—John Mumm, $7,025; Block Medina sandstone, $8,723; Mack block brick—G. W. Partridge, $7,196; vitrified paving blocks—Louis H. Gibb, $7,320; Preston paving brick—P. B. McNaughton, $6,300.

ROCHESTER, N. Y.—Reports state that the following bids have been received for paving University Ave.: H. B. Hooker, $44,409; F. A. Brotsch, $44,657; Lauer & Hagaman, $44,882; Geo. Chambers, $46,392; Wm. H. Jones & Sons, $47,470; Rock Asphalt Pavement Co., $47,707; H. N. Cowles, $48,672; Whitmore, Rauber & Vicinus, $49,708.

ROCHESTER, N. Y.—The contract for asphalt paving between the car tracks on Emerson St. has been let to the Rochester Vulcanite Co. at $7,040, and the Hudson Ave. contract to H. M. Cowles at $14,670.

ROME, N. Y.—Bids are asked until July 6 for about 10,000 sq. yds. of brick paving, as stated in our advertising columns (postponed from July 3). Fred. A. Coleman, Cy. Engr.

SYRACUSE, N. Y.—The following bids were received June 20 by Ed. A. Bond, State Engineer and Surveyor, for macadamizing James St: Chas. Hiscock, Syracuse, $3,463; F. O. Sterling, Syracuse, $3,450; J. Fogardus, Syracuse, $3,460; Geo. A. Rogers, Plattsburg, N. Y., $3,679. Macadamizing Cortland St.: John Kelly, Syracuse, $4,600; Clark & Hibbard, Syracuse, $4,376; Geo. A. Rogers, Plattsburg, N. Y., $4,967.

UTICA, N. Y.—The following contracts for paving have been let: Hickory St. to Warren-Scharf Asphalt Paving Co., at $13,295; and Lafayette St. to Utica Paving Co., at $15,871.

WHITE PLAINS, N. Y.—A resolution has been prepared by the counsel of the board of trustees of this village, and will be offered at its next meeting, which provides for a macadam pavement on several streets. The board is authorized to expend $150,000 for this class of work. B. F. Darling, Village Engr.

LONG BRANCH, N. J.—Press reports state that a resolution has been adopted awarding a 10-year maintenance contract for asphalt street repairs to the Barber Asphalt Paving Co., at $50,000.

MORRISTOWN, N. J.—Bids are asked by the board of chosen freeholders until July 20 for macadamizing a public road, according to reports. Merritt Blum, Dir.

TRENTON, N. J.—Bids are asked until July 4 for asphalt paving in East Front St. C. E. Murray, Cy. Clk.

CHESTER, PA.—Bids are asked until July 3 for the brick paving of Edgmont Ave., from 12th St. to 15th St. W. T. Cullis, Chn. Street Com.

PHILADELPHIA, PA.—Bids are asked by the department of public works until June 29 for about $300,000 worth of asphalt paving.

ERIE, PA.—Bids will soon be asked for about 11,200 lin. ft. of curbing.

MONONGAHELA, PA.—Press reports state that the contract for the improvement of the three miles of road extending from Elizabeth through the townships of Forward and Elizabeth, has been let to Booth & Flynn at an average cost of nearly $10,000 a mile.

PITTSBURG, PA.—Press reports state that the following contracts have been awarded for the improvement of about 14 miles of county roads: Lowrys Run, to Booth & Flinn, Ltd., for $40,265; Elizabeth, Booth & Flinn, Ltd., $62,595; Washington Pike, Booth & Flinn, Ltd., $97,745; Middletown, Booth & Flinn, Ltd., $35,371; Boston, Keeling & Ridge, $86,242.

WASHINGTON, D. C.—Bids are asked by the commissioners until July 8 for grading certain streets and avenues, as stated in our advertising columns.——It is stated that D. P. Guise, of Wilmington, N. C., has been awarded a $40,000 contract to furnish vitrified paving brick.

PORTSMOUTH, VA.—Bids are asked until June 30 for the purchase of $50,000 of 4% paving and grading bonds. E. Thompson, Jr., Cy. Clk.

WHEELING, W. VA.—Bids are asked by the board of public works until July 1 for paving certain streets and alleys with brick. Wm. H. Hornish, Clk.

RALEIGH, N. C.—Bids will soon be asked for the purchase of $100,000 of 5% street improvement bonds, according to reports.

BUCYRUS, O.—H. G. Feiring will let the contract for about $20,000 worth of pike road improvement.

CELINA, O.—Bids are asked until July 10 for ditching, grading and gravelling of the Doner road improvement, according to reports. A. W. Fishbaugh, Engr.

CINCINNATI, O.—Bids are asked until July 17 for the improvement of Burnett Ave. and until July 19 for keeping three streets in repair for a period of five years. Geo. H. Spellmire, Clk.

HAMILTON, O.—Bids are asked until July 15 for asphalt paving in North Third St. R. S. Woodruff, Cy. Clk.

ORRVILLE, O.—Reports state that the contract for improving Main St. with limestone, gravel and block pavement has been let to Davis & Archer, Bellaire, O., at $29,734.

TIRO, O.—It is reported that $15,000 worth of bonds have been sold for road improvement.

TOLEDO, O.—Reports state that the commissioners have authorized the expenditure of $45,000 for the improvement of country highways.

TOLEDO, O.—Bids are asked until July 7 for furnishing about 1,200 cords of crushed stone. Wm. M. Godfrey, County Audr.——Bids are asked until July 17 for block paving in three streets. Wm. O. Haist, Cy. Clk.

ST. MARY'S, O.—Bids are asked until July 21 for the brick improvement of Main and Front Sts. C. T. Hoffer, Cy. Clk.

WARREN, O.—Bids are asked until July 20 for repaving about 10,000 sq. yds. in High St., with asphalt block or brick upon a crushed stone or concrete foundation; also until July 21 for furnishing standard size repressed vitrified paving brick for paving High St., about 10,000 sq. yds. A. L. Jameson, Cy. Clk.

YOUNGSTOWN, O.—Bids are asked until July 8 for grading, draining and improving Garfield and Cherry Sts. C. E. Cross, Clk.

BOONVILLE, IND.—Bids are asked until July 18 for macadamizing about 29 miles of road in Boon township, according to reports. M. Folsom, County Audr.

ELKHART, IND.—Reports state that the contract for paving Pigeon and 2d Sts. has been let to the Central Bermudez Co. of Indianapolis, at $61,472.

LIGONIER, IND.—Bids are asked by the council until July 13 for grading and brick paving. R. E. Jeanneret, Cy. Clk.

WASHINGTON, IND.—Philip Hart, Cy. Clk., writes us that the proposition to build gravel roads failed to carry by 200 votes and that there is no bond issue.

BENTON HARBOR, MICH.—The contract for 8,260 sq. yds. of asphalt paving has been let to the Barber Asphalt Paving Co., at $14,350. L. Hemingway, Engr.

DETROIT, MICH.—Reports state that the following were the lowest bids received for paving: Seventeenth St., Talbot Paving Co., Medina curb, $7,836; Julius Porath, Elyria curb, $7,564. Meldrum Ave., Arthur C. Lloyd, Medina curb, $7,833; Elyria curb, $7,012. National Ave., Julius Porath, Medina curb, $8,414; Elyria curb, $8,276. Baker St., Lennane Bros., Medina curb, $7,216. Talbot Paving Co., Elyria curb, $7,219. St. Aubin Ave., Currie & Co., Medina curb, $21,540; Elyria curb, $20,364. Second St., J. Porath, $2,540. Atwater St., Wm. Lappin, $4,650.

GRAND RAPIDS, MICH.—It is reported that the contract for improving East Fulton St. has been let to Matheson & Klute at $10,800.

MANISTEE, MICH.—Bids are asked until July 3 for furnishing about 2,500 cu. yds. of crushed stone, according to reports. Henry Taylor, Cy. Clk.

CHICAGO, ILL.—Bids are asked until July 5 for repaving Rush St. bridge. L. E. McGann, Comr. Pub. Wks.

PEORIA, ILL.—Robert Marr writes us that the paving on Fredonia Ave., with asphalt, was vetoed by Mayor Lynch, and that brick will be substituted on request of property owners; also that the case of Dechman Ave. improvement in court since last winter, has been withdrawn by the city attorney; crushed rock wil be substituted.

TOPEKA, KAN.—Bids are asked until July 3 for grading, paving and curbing in four streets. J. H. Squires, Cy. Clk.

ST. LOUIS, MO.—The following are the lowest bids received by the board of public improvements for furnishing materials, etc., for the year to the street department: Furnishing and delivering macadam within the following districts: Gottlieb Eyermann, District A, $3,210; B, $3,250; C, $2,990; Fruin-Bambrick Construction Co., D, $15,000; E, $6,000; Heman Construction Co., F, $18,900; Bambrick-Bates Construction Co., G, $11,160; J. E. Perkinson, H, $31,120. Hauling macadam from workhouse quarries: Mueller Coal, Heavy Hauling & Transfer Co., District A., $1,490; C, $1,790; D, $17,900; Wade Bros. Construction Co., B, $11,400. Furnishing and delivering screened gravel: Jos. S. Fuqua, District A, $1,047; B, $6,780; Good Thing Sand & Gravel Co., C, $1,670; D, $5,940; E, $2,990; F, $6,880; G, $6,075; H, $6,960. Furnishing and delivering novaculite: Walter S. Townsend, District A, $498; B, $995; C, $2,463; D, $2,463; E, $48,750; F, $4,875; G, $497; H, $498. Repairing old sidewalks with brick: Harry F. Heman, District No. 1, $1,075; 2, $1,075; 3, $1,075; 4, $545. Constructing and reconstructing sidewalks with granitoid: Heman Construction Co., District No. 1, $19,400; 2, $27,800. Repairing alleys with limestone: Jno. C. Steffens, District No. 1, $1,950; St. Louis Stone Masons Co., 2, $2,400; Bambrick-Bates Construction Co., 3, $2,300. Repairing alleys with granitoid, brick and granite: McMahon & Cooney, District No. 1, $690; 2, $2,423; 3, $2,440; 4, $510. Repairing gutters, alley entrances, curbs and crosswalks with limestone: Gottlieb Eyermann, District No. 1, $5,515; 2, $6,305; Heman Construction Co., 3, $6,685; 4, $6,225. Repairing curbs and gutters with granitoid and alley entrances with vitrified brick or granitoid: Harry F. Heman, District No. 1, $730; 2, $1,098; 3, $1,398; 4, $808. Constructing new crosswalks of vitrified paving brick: Sarsfield Construction Co., District No. 1, $1,608; 2, $2,144; 3, $2,144.

LAKE CITY, COLO.—Bids are asked until July 8 for the construction of two sections of the state road. Addison J. McCune, State Engr, Denver, Colo.

TACOMA, WASH.—G. W. Roys, Cy. Clk., writes us that it is proposed to pave South 6th St., South 9th St., South 11th St. and A St.

MANUFACTURING PLANTS.

BROOKLYN, N. Y.—The brewing plant of the Maroon Brewing Co., at Flushing Ave. and Skillman St., John Doscher, Pres., was damaged by fire, June 24, causing a loss of about $100,000.

ALLEGHENY, PA.—It is reported that the Standard Ice Co. is about to erect a new $300,000 ice-plant on the site of the Standard Mfg. Co.'s old plant in this city. It is to be in operation by Oct. 1.

ALLENTOWN, PA.—Isaac A. Hall, Paterson, N. J., is reported to contemplate the erection of a 3-story brick factory building, 158 x 49 ft., at Allentown, for the manufacture of silk mill looms and the repair of silk mill machinery.

EDDYSTONE, PA.—The laboratory of the Eddystone Print Works was destroyed by an explosion, June 22, estimated loss, $25,000; fully insured.

JACKSON, GA.—It is reported that the Pepperton cotton mills in this city will soon enlarge its cotton mill and employ several hundred more hands.

BRIDGEPORT, ALA.—Mayor Whitcher and Dr. Zurwellily have been appointed a committee to secure a cotton mill for this town.

OPELIKA, ALA.—Reports state that Montgomery (Ala.) capitalists have bought 85 acres of land from Dr. D. M. Banks, near this city on the Central of Georgia R. R., and will build at once a $100,000 phosphate plant.

GAS PLANTS.

CAMDEN, N. J.—Bids are asked until July 17 for lighting the city with oil lamps where no gas or electric light is used, and until July 19 for lighting the city with gas for a period of one year. Jesse C. Bond, Chn.

EDINBURGH, SCOTLAND.—Bids are asked until July 22 for the construction of a 4-lift telescopic gas holder 250 ft. in diameter by 139 ft. deep, together with external guide framing, etc., complete. James McG. Jack, Clk., 25 Waterloo Place, Edinburgh.

NEW COMPANIES.—Easton Fuel Gas Co., Easton, Pa.; $10,000, with $1,000 paid in; Arthur E. Childs, Edward J. Fox, M. Hale Jones, of Boston, Mass.

Automatic Gas Lighting Co., Baltimore, Md.; $100,000; J. Joseph Stears, J. Thos. Reinhardt, James C. Clarke.

Calumet Oil Co., San Francisco, Cal.; $500,000; Wilmot H. Garlick, Chas. Willard Hall, F. E. Jewell, of San Francisco.

Western Oil & Mineral Development Co., Bakersfield, Cal.; $500,000; B. A. Hayden, J. A. Hughes, R. G. Morrison, Bakersfield.

Mount Goddard Oil Co., Fresno, Cal.; $200,000; F. K. Prescott, M. K. Harris, C. A. Telfer, Fresno, Cal.

Bradford Oil Co., Fresno, Cal.; $250,000; H. A. Partt, F. G. Goode, E. E. Manheim, Fresno.

Golden Gate Oil & Transmission Co., San Francisco, Cal.; $200,000; Ernest S. Angel, Clarence H. New, Edward J. Stewart, of Oakland.

Alaska Coal Oil Co., San Francisco, Cal.; $1,000,000; B. Cogan, Lewis W. Williams, of Oakland; K. Schilling.

Black Diamond Oil Co., Hanford, Cal.; $32,000; W. Walker, John Welcher, W. F. Harrison, of Hanford.

Little Tar Canyon Oil Co., Hanford, Cal.; $100,000; P. E. Newman, W. J. Burnett, Louis Nathan, of Hanford.

Richland Natural Gas & Fuel Co., Marietta, O.; $500,000; A. J. Mercer, Pres. and Genl. Mgr.; John A. Peland, Chillicothe, Secy.; O. D. Bleakley, Franklin, Pa., Treas.

Boro Oil & Gas Co., Gowanda, N. Y.; $2,500; H. M. Blasdell, North Collins; W. S. Lawton, Lawton Station.

Hamilton Aceyl Gas Co., Detroit, Mich.; $25,000; M. H. Hamilton, T. E. Tarsney, W. G. Fitzgerald, Detroit.

Refiners' Gas Co., Warren, Pa.; $50,000, with $5,000 paid in; J. A. Veile, Pres.; W. Dixon Ellis, New York; Geo. W. Ellis, Philadelphia.

Wyandotte Gas Co., South Bethlehem, Pa.; $5,000, all paid in; Charles T. Hess, West Bethlehem, Pa., Treas.; R. H. Sayre and W. A. Wilbur, of South Bethlehem.

Mt. Joy Gas Co., Edenburg, Pa.; $16,000, with $1,600 paid in; L. W. Dietterich, Church, Pa., Treas.; Ellis Hall.

Marquette Gas Light Co., Marquette, Mich.; $100,000; C. H. V. Cavis, C. H. Call, Marquette; J. S. Fay, Jr.

New England Acetylene Gas Co., $100,000; H. K. Bellows, R. H. B. Warburton, Springfield, Mass.

MISCELLANEOUS CONTRACTS.

DOCKS.—Buffalo, N. Y.—It is stated that the question of building excursion docks off the foot of Porter Ave., at a cost of $100,000, is being considered.

DREDGING.—Oswego, N. Y.—Bids are asked until July 24 for dredging in Ogdensburg Harbor, N. Y., as stated in our advertising columns. Capt. Graham D. Fitch, U. S. Engrs.

WHARVES.—San Francisco, Cal.—Reports state that the contract for repairing Howard and Harrison St. wharves was awarded June 13 to the Dundon Bridge Co. at $13,007.

MAPS—PLATS.—Mansfield, O.—Bids are asked until July 15 for furnishing maps and plats of the wards of the city and of the townships of Richmond county. Chas. W. Fritz, County Audr.

EXCAVATION.—Cincinnati, O.—Bids are asked by Earnshaw & Punshon, Engrs., Glenn Bldg., Cincinnati, until July 15 for 100,000 yds. of clay excavation, as stated in our advertising columns.

DREDGING.—Tampa, Fla.—Bids are asked until July 31 for dredging and removal of rock in Hillsboro Bay and River, Fla., as stated in our advertising columns. Capt. Henry Jervey, U. S. Engrs.

DREDGING.—Galveston, Tex.—The only bid received June 15 for deepening the channel from Galveston Harbor to Texas City was from the Rittenhouse-Moore Dredging Co., Mobile, Ala., at $230,000.

PORTLAND CEMENT.—Savannah, Ga.—Bids are asked until July 22 for Portland cement, delivered at Tybee Island, Ga., as stated in our advertising columns. Capt. Cassius E. Gillette, U. S. Engrs.

REMOVING WRECK.—New York Harbor.—Bids are asked until July 28 for removing barge in New York harbor, as stated in our advertising columns. Maj. H. M. Adams, U. S. Engrs., New York.

PARK WORK.—Newark, N. J.—Bids are asked by the Essex County Park Commission until July 5 for regulating, grading and draining Westside Park, as stated in our advertising columns. A. Church, Secy.

TELEPHONE LINE.—Cleburne, Tex.—It is stated that the Granbury Telegraph & Telephone Exchange has arranged to build an independent telephone line from Granbury to this place, and has applied for a franchise.

COMPRESSED AIR PLANT.—Chicago, Ill.—Reports state that the Hartley Power Supply Co. proposes to erect a compressed air plant on the West Side to cost $150,000, with 50 supply stations, at an annual cost of $100,000.

CRANES.—Havre, France.—It is stated that the Chamber of Commerce proposes to erect four new cranes on the Quai Colbert, a floating crane of four tons and a warehouse on Quai de Marseille, at a cost of 200,000 francs.

SURVEY.—Dartmouth, N. S.—The following bids have been received for a survey and plan of the town: Wm. P. Morrison, Dartmouth, $1,100; W. A. McDonald, Halifax, $795; Arch. Foster, Kingston, N. S. (accepted), $700.

PIER.—Northampton, Mass.—Bids are asked by the Connecticut River Bridge Committee until July 6 for the construction of a pier in the Connecticut River bridge, as stated in our advertising columns. L. M. Thacher, Engr.

DREDGING.—Washington, D. C.—Bids are asked until July 28 for dredging in Occoquan Creek, Nomini Creek and Lower Machodoc Creek, Va., as stated in our advertising columns. Lieut.-Col. Chas. J. Allen, U. S. Engrs.

DREDGING.—Norfolk, Va.—Bids are asked until July 21 for dredging and bank protection in waterway from Norfolk, Va., to Sounds of North Carolina, as stated in our advertising columns. Maj. Thos. L. Casey, U. S. Engrs.

RUBBLE STONE RIP-RAP.—Boston, Mass.—Bids are asked until July 29 for the construction of rubble stone rip-rap on Long Beach, Plymouth Harbor, Mass., as stated in our advertising columns. Col. Chas. R. Suter, U. S. Engrs.

TELEPHONE SYSTEM.—Meridian, Miss.—Press reports state that a 30-year franchise has been granted to the Cumberland Telephone & Telegraph Co., which proposes to erect a $30,000 plant in this city and to open communication with New Orleans, Nashville, Atlanta, Memphis and Omaha.

EXCAVATION.—New York, N. Y.—Bids are asked by the department of parks, Arsenal, Central Park, until July 7 for about 11,000 cu. yds. of excavation at Red Hook Park, Borough of Brooklyn; also for furnishing and delivering gravel for drives and bridle roads in Central and Riverside Parks. Geo. C. Clausen, Comr.

BREAKWATER.—Chicago, Ill.—Press reports state that the Lincoln Park Board has decided to construct a breakwater from Diversey Boulevard to Elm St., a pier will be built of piles and large stone about 500 ft. from shore; the lake will then be filled in with earth from the present sea-wall to a line about 200 ft. from the shore.

MAIN DRAINAGE.—Dublin, Ireland.—Bids are asked until July 15 for the construction of about ¾-mile of a high-level outfall sewer, 8 ft. in diameter; also a seawall in the Pigeon House Harbor; also 18 precipitation tanks, sludge pits, effluent channels, penstocks, valves, etc. Henry Campbell, Town Clk, City Hall, Dublin.

MOULDING MACHINERY.—New York, N. Y.—Reports state that Edward Schoening, of the machinery firm of Carl Schoening, of Berlin, Germany, is here for the purpose of making purchases of moulding machinery for a new foundry, to be erected in Berlin. He will leave for Germany on July 27, and until then may be found at the offices of C. F. Gessert, 32 Dey St., New York.

DUMP SCOWS.—Chattanooga, Tenn.—The following bids were received June 17 for the construction of three dump scows: M. A. Sweeney Ship Yard & Foundry Co., Jeffersonville, Ind., $11,847; Alonzo J. Tullock, Leavenworth, Kan., $5,850; Elizabeth Marine Ways Co., Elizabeth, Pa., $6,546; Alexander R. Perry, Chattanooga, $5,778; Ed. J. Howard, Jeffersonville, Ind., $9,900.

CONTRACT PRICES.

PIPE SEWER.—Erie, Pa.—The following contract has been let to Edward Driscoll for constructing a 15-in. pipe sewer in three streets: 15-in. pipe sewer, 85 cts. a ft., straight and curve pipe; $1 for branches; 35 cts. for 9-in. pipe; 25 cts. for 6-in.; $28 for manholes; $30 for catchbasins.

BREAKWATER.—Calumet Harbor, Ill.—The following bids were received by Maj. W. L. Marshall, U. S. Engr., Chicago, for constructing a breakwater in Calumet Harbor; contract was awarded Hausler & Lutz Towing & Dock Co.:

Bids Received at Chicago, Ill., June 22, 1899, for Constructing Breakwater for Calumet Harbor, Ill.

Quantities.		Hausler & Lutz Towing & Dock Co., S. Chicago.	Edward Gillen, Racine, Wis.	Christie, Lowe & Heyworth, Chicago.	Fitzsimons & Connell Co., Chicago.	Lydon & Drews Co., Chicago.
Timber: Hemlock	6,124,746 ft. B.M.	$18.75	$18.50	$22.60	$18.75	$20.25
Pine	1,592,676 " "	23.00	23.75	27.60	23.75	22.50
Pine decking	565,000 " "	20.00	17.50	22.00	18.00	22.00
Piles: Pine	680 each	8.00	8.60	10.00	12.00	9.00
White oak	39 "	10.00	12.00	11.00	10.00	9.00
Oak plank	101,200 ft. B.M.	35.00	35.00	35.00	30.00	40.00
Drift bolts	683,725 lbs.	.03	.03	.035	.03	.03
Spikes	23,364 "	.04	.04	.035	.03	.04
Screw bolts	11,297 "	.04	.03	.035	.04	.04
Dredge chain for clumps of piles	1,000 "	.08	.12	.15	.08	.10
Stone	29,743 cords	5.25	5.40	5.75	5.60	6.00
Steel plate	804 lbs.	.10	.06	.06	.10	.10
Dredging	500 cu. yds.	.20	.20	.30	.25	.25
Total		$350,452	$353,545	$402,092	$362,932	$383,472

CONDUIT WORK.—Erie, Pa.—The following contract has been let to Kraft & Walther for extending and equipping the conduit system with poles and cross-arms: 60 ft. poles, $51.50; 50-ft. poles, $40; 10-pin cross-arms, $1.25; 10-pin cross-arms double, $2.40. Other bidders were Mayer Bros. at $55 and $42 respectively for poles, and B. J. Murphy, $57.50 and $47.50.

ASPHALT PAVING.—Erie, Pa.—For the second time the joint session of the councils on June 19 refused to award the Walnut St. sheet asphalt pavement, from 8th to 12th St. To award requires a majority vote in both the select and common branches. The select voted to award 5 to 1, but the common was a tie, 6 to award and 6 against. The bidders were Cleveland Trinidad Co., Cleveland, O., $2.83 for a 15-year guarantee, a sq. yd. complete; $2.33 for 10-year guarantee. Mayer Bros., Erie, $2.23 a sq. yd. for either 10 or 15-year guarantees.

JETTY WORK.—Cottage City, Mass.—F. N. Wales, Clk. Harbor and Land Comn., State House, Boston, writes us that the following bids were received June 22, 1899, for stone jetties in the channel at Cottage City: C. E. Davis, 33 Commercial St., New Bedford, $2.32 a ton for stone jetties; E. S. Belden, 217 Laurel St., Hartford, Conn., $2.23 for stone jetties; A. E. Smith, 25 Pine St., New York, $2.25, and $6,500 for excavating channel.

PIPE SEWERS.—Baraboo, Wis.—The following bids were received June 22, 1899, for constructing pipe sewers: W. G. Kirchoffer, Cy. Engr.: (1) being for 6-in. pipe sewer, 396 ft.; (2) 8-in., 1,900 ft.; (3) 12-in., 561 ft., laid through pond; (4) manholes, 7; (5) catchbasins, 7; (6) lampholes, 3; excavation, all in glacial drift, and composed of boulder, clay and sand, 8 to 10 ft. deep: Harding & Nelson, Racine, (1) 30 cts., (2) 42 cts., (3) 70 cts., (4) $33, (5) $42, (6) $5, total, $1,805; E. T. Webster, Dubuque, Ia., (1) 43 cts., (2) 48 cts., (3) 65 cts., (4) $38, (5) $38, total, $1,832; J. O. Jones, Racine, (1) 36 cts., (2) 46 cts., (3) 44 cts., (4) $23, (5) $23, (6) $2.50, total, $1,497 (incomplete bid); O. Schaddo, Baraboo, (5) $41.50, total $1,688; John Arnott Baraboo, (5) $41.70, total $1,707; the latter two were each awarded a portion of the work.

ASPHALT PAVING.—San Antonio, Tex.—E. G. Trueheart, Cy. Engr., informs us that the following contract has been let to the Municipal Improvement Co., San Antonio, for 20,890 yds. of natural rock asphalt paving: Concrete, $5.15 a cu. yd.; asphalt, 10-year guarantee, $1.09; curbing, 56 cts. a lin. ft. The street railway will pay about $20,000 of the cost.

BRICK PAVING.—Salamanca, N. Y.—F. W. Dalrymple, Engr.-in-Charge, informs us that the following bids were received June 22 for brick paving, as stated in our advertising columns; contract awarded J. F. Connors:

Bids Received at Salamanca, N. Y., June 22, 1899, for Brick Paving, Etc.

Quantities.		Girard Const'n Co., Philadelphia.	John Sheehan, Bradford, Pa.	McCan, Hubble & Co., Salamanca.	J. K. Van Campen, Olean.	Gipp & Baltz, Buffalo.	F. P. Spaulding, Bethlehem.	J. F. Connors, Fulton.	W. D. Dodge, Buffalo.
Excavation	11,800 cu. yds.	$0.23	$0.38	$0.18	$0.20	$0.18	$0.20	$0.19	$0.18
Paving on 6-in. conc'te.	20,635 sq. yds.	1.35	1.28	1.26	1.29	1.23	1.22	1.22	1.31
Curb: Straight	13,740 lin. ft.	.29	.31	.32	.32	.36	.34	.31	.275
Circular	280 " "	.62	.45	.40	.50	.36	.50	.45	.30
Resetting	200 " "	.10	.10	.10	.10	.10	.10	.10	.05
Drain tile	1,000 " "	.20	.04	.05	.06	.06	.10	.045	.09
Manholes	8 each	30.00	25.00	25.00	20.00	20.00	25.00	20.00	21.00
Catchbasins	17 "	22.00	25.00	25.00	30.00	18.00	30.00	30.00	24.00
Inlets	2 "	15.00	15.00	14.00	10.00	15.00	25.00	15.00	24.00
Total		$36,868	$33,637	$33,356	$34,296	$33,228	$33,226	$32,567	$33,642

DREDGING.—New Haven, Conn.—The following bids were received June 8, 1899, by Maj. S. S. Leach, U. S. Engr., for dredging New Haven Harbor, 3,287,000 cu. yds.: John T. Regan, Chicago, 6 cts. a cu. yd.; Morris & Cummings Dredging Co., New York, 7.18 cts.; Rittenhouse-Moore Dredging Co., Mobile, Ala., 7 cts.; Virginia Dredging Co., Richmond, Va., 7.18 cts.; Geo. H. Breymann & Bros., Toledo, O. and East Boston, Mass., 12 cts.; Wm. H. Taylor, Jr., Jersey City, 6¾ cts.; W. H. Beard Dredging Co., New York, 8 cts. Bridgeport Harbor, Conn.: (1) being for 2,226,500 yds. of dredging, (2) for 20,000 tons of stone in place: Hartford Dredging Co., Hartford, Conn., (1) 12 cts., (2) $2; Rittenhouse-Moore Dredging Co., Mobile, Ala., (1) 9.22 cts., (2) $2.50; W. H. Beard Dredging Co., (1) 10.68 cts., (2) $1.98; Morris & Cummings, (1) 12 cts., (2) $2; J. P. Randerson, Albany, N. Y., (1) 10 cts., (2) $1.95; W. H. Taylor, Jr., Jersey City, N. J., (1) 12 cts., (2) $2; Hughes Bros. & Bangs, Syracuse, (1) 5 cts., (2) $2; The Hartford Dredging Co. submitted the only bid for 6,500 yds. of dredging in Cos Cob Harbor, Conn., at 18 cts.

ASPHALT PAVING.—Chicago, Ill.—The following are the lowest bids received June 13, 1899, for paving in certain streets: 32d St.—Asphalt, Cottage Grove to Lake Ave., Henry Roth, $2.04; total, $3,254. Ridgeway Ave.—Asphalt, Chicago Ave. to Ohio St., R. F. Conway Co., $2.22; $11,716. W. 19th St.—Asphalt, California to Albany Ave., R. F. Conway Co., $2; $21,598. Lexington St.—Asphalt, Central Park Ave. to Douglas Boulevard, Conway Company, $2; $14,075. Claremont Ave.—Cedar, Taylor to Grenshaw, Smith, Moss & Brown, $1; $2,286. North Ave.—Brick, Clark to La Salle, J.H. Esson, $2, $1,966; Chicago Ave.—Brick, Clark to river, Gaffney, Long & Co., $1.88, $30,188. Carpenter—Brick, Madison to 150 ft. south of Kinzie, Gaffney, Long & Co., $1.90; $20,283. Hermitage Ave.—Brick, Irving Park Boulevard to Addison, Kelly & McAdams, $1.75; $19,339. May—Brick, 63d to 67th, J. A. Sackley, $1.79; $26,886. Park Ave.—Brick, Ashland to Leavitt, J. A. Sackley, $1.87; $30,301; West 12th—Brick, Halsted to Ashland, Gaffney, Long & Co., $1.89, $33,962; 32d—Asphalt, Michigan to South Park, Barber Asphalt Company, $2.69; $10,000. Division—Brick, Clark to the river, Gaffney, Long & Co., $1.88; $43,396.

ASPHALT PAVING.—Owosso, Mich.—Only one bid was received June 1, 1899, for asphalt paving, that being from the Warren-Scharf Asphalt Paving Co., the contract being awarded it at following prices: Brick paving, $1.50, asphalt, $1.70; cement filler, 8 cts.; tar filler, 15 cts.; cement curb and gutter, 60 cts.; 24-in. storm sewer, 95 cts.; 8-in. sewer, 38 cts.; manholes, $25; catchbasins, $28; concrete, $4 a yd.; total, $14,014. John L. Ash, Cy. Clk.

DREDGING AND EXCAVATION.—Portland, Me.—Maj. S. W. Roessler, U. S. Engr., Portland, received the following bids June 12, 1899, for dredging and ledge excavation: Augustus R. Wright, Portland, submitted the only bid for 125,000 yds. of dredging in Ibec channel, at 25 cts. a yd. and $5 a ton for removing bowlders for over 5 tons each; ledge excavation at Mooseabec Bar and Sullivan Falls, Me., (1) being for 800 cu. yds. of ledge in Mooseabec Bar and (2) for 350 yds. of ledge in Sullivan Falls: Wm. H. Simmons, Rockland, Me., (1) $15 a cu. yd; Geo. A. Rogers, Plattsburg, N. Y. (1) $16.50, (2) $38.90; H. Herbert Sturgis, South Standish, Me., (1) $16, (2) $25; C. W. Johnson, Lewes, Del., (1) $14.90, (2) $33; Gilbert H. Harris, Boston, (1) $14.70, (2) $35.30.

REMOVING ROCK AND DREDGING.—Hudson River, N. Y.—The following bids were received by Col. J. W. Barlow, U. S. Engr., Army Bldg., New York, June 22, 1899, for removing rock and for dredging in the Hudson River; as advertised in Engineering News; H. C. Wilson, Ch. Clk.; Peter W. Myers & Son, of Albany, N. Y., bid 19 cts. for 500,000 cu. yds. north of High Dike; (1.) being for 30,000 cu. yds. of rock removal; (2.) for 400,000 cu. yds. of dredging south of north end of High Dike and (3.) for 500,000 cu. yds. dredging north of north end of High Dike:

	1.	2.	3.	Total.
Kirk, Driscoll & Co., Syracuse.	$4.75	19 cts.	25 cts.	$341,000
R. G. Packard Co., New York.	7.00	23¼"	31 "	459,000
E. C. Moore, New York	5.20	23.7"	30.7"	404,300
Internatnl. Con. Co., Syracuse	4.90	20¼"	25¼"	354,250

DREDGING.—Portland, Me.—Hamilton & Sawyer, Chebeague, Me., submitted a bid June 15, 1899, for 7,000 yds. of dredging in Georgis River at 16½ cts. a yd.

ARTESIAN WELL.—League Island, Philadelphia, Pa.—We are informed that the following bids were received June 24, 1899, for sinking an artesian well at the navy yard: Thos. H. Harper, Jenkintown, Pa., $4.00 a ft.; Geo. Pfeiffer, Jr., Camden, N. J., lump sum, $2,950 (informal); Geo. J. Kennedy, Philadelphia, 15-in. well, 15 cts. a ft.; 10-in., 12 cts.; 8-in., 10 cts.; P. H. & J. Conlan, Newark, N. J., $6.25.

LAYING WATER PIPE.—Milwaukee, Wis.—A. A. Bues has been awarded the contract at $38.70 a lin. ft. for laying 206 ft. of 24-in. cast-iron water pipe across the Menomonee River. The main will be sunk 26 ft. below the surface of the river.

PIG LEAD.—Cleveland, O.—We are informed that the following bids were received June 16, 1899, for furnishing 100 tons of 2,000 lbs. of pig lead, all local bidders: The Gibson & Price Co., $92; The W. M. Pattison Supply Co., $94.80; The Cleveland Lead Mining Co., $92.50.

WATER PIPE AND SPECIALS.—Cincinnati, O.—We are informed that the following bids were received by the water-works commissioners June 13, 1899, for furnishing cast-iron water pipe and special castings for the settling reservoirs and for the pump mains from the Eastern Pumping station: Schedule "A," pipe and castings to be delivered before Dec. 1.—Straight socket and spigot pipe, 4-in., 10.4 tons; 6-in., 1.6 tons; 8-in., 2 tons; 12-in., 8 tons; 24-in., 131 tons; 30-in., 145 tons; 36-in., 13 tons; 60-in., 639 tons: U. S. Cast-Iron Pipe Co., Chicago, $27.50 a ton; Camden Iron Works, Philadelphia, Pa., $33 a ton; Straight flanged pipe, 60-in., 43 tons; special castings, socket and spigot, 59 tons; special castings, flanged, 100 tons, U. S. company, $70 a ton; Camden company, $55, $60 and $75 a ton, respectively. Schedule "B," straight socket and spigot pipe, 8-in., 295 tons; 48-in., 114 tons; 60-in., 4,561 tons; 72-in., 202 tons; U. S. company, $30.50 a ton; Camden company, $26 a ton. Straight flanged pipe, 60-in., 2.4 tons; special castings, socket and spigot, 475 tons; special castings, flanged, 108 tons, U. S. company, $70, $70 and $80, respectively; Camden company, $55, $60 and $75 a ton, respectively. Totals—U. S. Cast-Iron Pipe & Foundry Co., $240,069; Camden Iron Works, $215,959.

SEWER PIPE, ETC.—Grass Valley, Cal.—The following contract has been let to Gladding, McBean & Co., for furnishing sewer pipe: 10-in. pipe, 28 20 cts. a ft.; 8-in., 18.75 cts.; 6-in., 14¼ cts.; total, $1,526. H. E. Biggs Co. has the contract for furnishing cast-iron water pipe at $1.25 for 8-in. pipe and 80 cts. for 6-in.

SEWERS.—New York, N. Y.—The following are the lowest bids submitted June 21, 1899, for sewers in certain streets: 188th St., (1) between Amsterdam and Audubon Aves., and (2) between 11th and Audubon Aves.; S. M. De Pasquale, (1 and 2), 36 ft. brick sewer, 42 × 28 ins., $8.70 a ft.; (1) 275 ft., 15-in. pipe, (2) 245 ft. $3.64; (1) 525 yds. rock excavation, (2) 450 yds., $2 25; (1 and 2) 1,000 ft. of timber, $15; 9th Ave., New York Sewer Construction Co., 191 ft. 42 × 28 ins., brick, $7; 635 ft. 15-in. pipe, $5; 45,000 ft. timber, B. M., 1 ct.; total, $4,512; Lawrence St., E. R. Patterson Construction Co., 825 ft., 42 × 28 in. brick sewer, $9.25 a ft.; 12-in pipe, 9 ft., $1; 6-in. pipe, 150 ft., 40 cts.; facing 800 lin. ft., 1 ct.; timber, 53,000 ft., B. M., 1 ct.; total, $7,985; Nagle Ave., Jas. Pilkington, brick sewer, 66 × 48 ins., 26 ft. class I, $16 a ft.; 66 × 48 ins., 600 ft., class II., $12; total, $7,616; Audubon Ave., Wm. J. Moore, brick sewer, 42 × 28 ins., 33 ft., $10; pipe, 480 ft., $6; 12-in. culvert, 60 ft., $2.00; rock excavation, 900 yds., $2; receiving basin, $150; timber, 2,500 ft., 1 ct.; total, $5,280.

PAVING.—Kansas City, Mo.—The following contracts were let June 17, 1899, for paving: Asphalt paving—Bellefontaine, 3,765 yds., Barber Asphalt Paving Co., $2.12; Bellefontaine, 4,629 yds., Gilsonite Paving Co., $2.10; Brooklyn, 3,482 yds., Barber Co., $2.12; Charlotte, 3,654 yds., Barber Co., $2.12; Garfield, 1,977 yds., Gilsonite Paving Co., $2.15; 26th St., 3,959 yds., Barber Co., $2.12; Thompson, 3,375 yds., Barber Co., $2.12; Virginia, 3,800 yds., Rock Creek Co., $1.97; Wabash, 5,793 yds., Barber Co., $2.12; 17th St., brick, 6,931 yds., A. R. Mense, $1.59¼; grading—52,450 yds., $16,376. Granitoid sidewalks, Bellefontaine, 6,500 sq. ft., Kansas City Cement Co., 19¼ cts.

ASPHALT PAVING.—Rochester, N. Y.—The following bids were received by the executive board June 21, 1899, for asphalt paving: Frost Ave., Whitmore, Rauber & Vicinus, $2.18 a sq. yd.; Rock Asphalt Co., $2.20; Rochester Vulcanite Co., $2.22; Warren-Scharf Asphalt Paving Co., $2.23; total about $50,000; Jay St., Rochester Vulcanite Co., $2.15 a yd.; Rock Asphalt Co., $2.20; total about $25,000; Sherman St., Whitmore, Rauber & Vicinus, $2.15; Rochester Asphalt Co., $2.20; Warren-Scharf Co., $2.30; Rochester Vulcanite Co., $2.22.

PAVING.—Elizabeth, N. J.—On June 1, 1899, bids were received for paving in seven streets. The bids were about as follows: Asphalt paving, New Jersey Mexican Asphalt Paving Co., $2.09; John F. Shandley, $2.20, rock, $2.30; New Jersey Asphalt Paving Co., $2.10; Atlantic Asphalt Co., $2.08; Barber Asphalt Paving Co., $2.25; Sicilian Asphalt Paving Co., $2.50; New Jersey & Trinidad Co., $2.10. Brick paving: F. R. Pratt, $1.71; Headley & Christie, $2.03; the Palisade Construction Co., $2.17; J. F. Shandley, $1.88; Foreman Stone Co., $1.88; J. F. Dolan, $2.25. Macadam paving: L. Quien, $1.42; Palisade Company, $1.70; J. F. Shandley, $1.54; T. Harrington, $1.48; M. Wade, $1.60; M. Fitzgerald, $1.59; J. F. Dolan, $1.79. Telford macadam paving: J. F. Shandley, 84 cts.; Thos. Harrington, 98 cts.; Palisade company, $1.15; Donovan Bros., $1.02; M. Fitzgerald, $1.02; J. F. Dolan, 93 cts.; P. Faughnan, 96 cts. The total lowest bids on the seven streets range about as follows: First Ave., asphalt, Atlantic Asphalt Company, $42,487; brick, F. R. Pratt, $35,979; macadam, M. Wade, $31,028; Telford, M. Fitzgerald, $21,367; Morris Ave., asphalt, Atlantic company, $18,936; Franklin St., asphalt, Atlantic company, $49,425; brick, F. R. Pratt, $41,667; macadam, L. Quien, $35,710; telford, P. Faughnan, $18,148; South Park St., asphalt, Atlantic company, $10,961; brick, F. R. Pratt, $9,261; macadam, Thos. Harrington, $7,032, also for telford, $7,091; Marshall St., asphalt, Atlantic company, $49,950; brick, F. R. Pratt, $42,186; macadam, L. Quien, $35,839; telford, $26,175; Livingston St., asphalt, Atlantic company, $60,123; brick, F. R. Pratt, $60,864; macadam, J. F. Shandley, $44,966; telford, J. F. Shandley, $34,393; Fulton St., asphalt, Atlantic company, $48,663; brick, $41,136; macadam, T. Harrington, $36,296; telford, M. Fitzgerald, $25,423; Front St., macadam, L. Quien, $9,029; 6th St., macadam, T. Harrington, N. K. Thompson, St. Comr.; J. J. Manning, Clk.

STONE, DREDGING, ETC.—Boston, Mass.—The following bids were received by Col. Chas. R. Suter, U. S. Engr., June 26, 27 and 28, 1899, respectively: Rubble stone for Newburyport Harbor, Mass., Rockport Granite Co., Pigeon Granite Co., Cape Ann Granite Co., Rockport, Mass., $1.09 a ton of 2,000 lbs; Edwin Canney, Pigeon Cove, Mass., $1.09. Dredging in Town River, Mass., Augustus B. Martin, Boston, 37 cts. a cu. yd. for dredging; $5 a cu. yd. for removing bowlders over three tons; Alonzo E. Smith, New York, 35 cts. and $8; Joseph E. White, Quincy, 24¼ cts. and $10. Dredging in Weymouth River, Mass., A. B. Martin, 42 cts. for dredging; $5 a yd. for removing bowlders of over three tons; J. E. White, 27 cts. and $10; Eastern Dredging Co., Boston, 43¾ cts. and $5; A. E. Smith, 45 cts. and $8; Chas. H. Souther, 44½ cts.

STREET LIGHTING.—Washington, D. C.—The following bids have been accepted for street lighting: Georgetown Gaslight Co., to furnish and maintain 400 or more gas lamps at $20 a year; Washington Gaslight Co., 4,000 at $20 a year; Potomac Electric Lighting Co., 50 incandescent lights, $20, and additional lights $19.50. Both the Potomac & United States Co., bid $19.25 a light a year for arc lighting, but as the rate is above that authorized by Congress, $72 a lamp a year, an award has not yet been made.——For furnishing 300 iron gas lamp posts the following bids have been received: Belmont Iron Works, Philadelphia, $6.21 each; Stuart R. Carr, Baltimore, $6.95; M. J. Drummond & Co., New York, $7.85.

DREDGING.—Erie, Pa.—We are informed that the following bids were received, June 26, 1899, by Maj T. W. Symons, U. S. Engr., Buffalo, for 400,000 yds. of dredging in the harbor: Hingston & Woods, Buffalo, 13⅜ cts. a yd.; Corkin, Stickney & Coam, Detroit, 15¼ cts.; G. H. Breymann & Bros., Toledo, 8¼ cts.; James Rooney, Toledo, 15 cts.; James B. Donnelly, Buffalo, 11 cts., and The Buffalo Dredging Co., Buffalo, 12 cts.

PIPE SEWERS.—Quincy, Mass.—The following lowest bids were submitted, June 26, 1899, by Jas. Driscoll & Son, Brookline, Mass., for pipe sewers in section 10 of the system: 7,000 cu. yds. earth excavation, 0 to 8 ft., 59 cts.; 1,000 cu. yds. earth excavation, 8 to 14 ft., 90 cts.; 40 cu. yds. earth excavation, 14 to 20 ft., $1.50; 60 lin. ft earth excavation in tunnel, $3; 115 cu. yds. brick masonry, $5; 600 cu. yds. concrete masonry, $4; 640 ft. laying 8 and 10-in. sewer pipe, 10 cts.; 3,670 ft. laying 12 and 15-in. sewer pipe, 15 cts.; 3,750 ft. laying 18-in. sewer pipe, 20 cts.; 8,000 ft. laying underdrain, 20 cts.; 100 ft. laying chimneys, 10 cts.; 40 yds. block paving around manholes, 50 cts.; total, $11,240. The following are the totals of the other bidders: M. Russo & Co., Boston, $14,765; Frank L. Allen & Co., Worcester, Mass., $13,975; H. A. Hanscom & Co., Boston, $13,455; Jno. J. Falvey, Boston, $11,662; C. E. Trumbull & Co., Boston, $11,432; E. W. Everson and W. H. Sherman, Providence, $11,430.

INDUSTRIAL NOTES.

INTERNATIONAL CORRESPONDENCE SCHOOLS, of Scranton, Pa., have issued a circular stating that the text books, question papers and drawing plates used by them are copyrighted, and that they have brought suit for violation of copyright against the United Correspondence Schools Co., F. W. Ewald, et al., New York City, and the American School of Correspondence, R. S. Peale, et al.

TORBERT & PECKHAM is the title of a new firm, doing business as general selling and purchasing agents in railway and contractors' supplies, etc. The firm is composed of Mr. Alfred C. Torbert, who was formerly purchasing agent for the McArthur Bros. Co., contractors, of Chicago; and Mr. Frederick A. Peckham, who was for several years the Western advertising representative of Engineering News. The offices of the new firm are at 1003 Monadnock Block, Chicago, Ill.

BETHLEHEM STEEL CO., South Bethlehem, Pa., formerly the Bethlehem Iron Co., has undertaken the manufacture of steel castings. The company informs us that it has every facility for carrying on this work, and will be able to turn out the best quality of steel castings of the largest dimensions. While the firm has been producing these castings for some time for government service, it has not heretofore made a specialty of supplying the general trade.

THE UNITED STATES ENAMELED BRICK CO., chartered June 19, held a meeting of stockholders in the office of the Reese-Hammond Fire Brick Co., Bolivar, Pa., on June 24, and elected the following board of directors: J. B. Hammond, E. R. Hammond, B. F. Reese, Leonard Roden, all of Bolivar, Pa., and J. B. Sommerville, of Wheeling, W. Va. The following officers were also elected for the ensuing year: J. B. Hammond, President; B. F. Reese, Vice-President; W. M. Wynn, Secretary; E. R. Hammond, Treasurer, and Leonard Roden, General Manager. It is the intention of the company to take the small experimental plant of the Reese-Hammond Fire Brick Co. and enlarge the same at once, and expects to be in the market within 90 days with a variety of enameled brick in staples and novelties of most beautiful effect. The secret process that this company owns and controls by which the brick will be made will enable it to produce a brick that will not craze.

ESSEX COUNTY PARK COMMISSION.

PROPOSALS FOR REGULATING, GRADING AND DRAINING WESTSIDE PARK, NEWARK, N. J.

NEWARK, N. J.

Sealed proposals for the above work, indorsed with the above title, also with the name of the person or persons making the same, and the date of presentation, will be received at the office of the Essex County Park Commission, 800 Broad street, Newark, N. J., on Wednesday, the fifth day of July, 1899. The commission will be in session from 3 to 3:30 P. M. of that date, to receive the proposals, which will not be received at any other time or place.

Bidders are required to state in their proposals, under oath, their names and places of residence; the names of all persons interested with them therein; and if no other person be so interested, they shall distinctly state the fact.

The proposal must be verified by the oath, in writing, of the party making such proposal, that the several matters therein stated are in all respects true. When more than one person is interested in the proposal, the verification must be made by all the parties interested.

Each proposal shall be accompanied by the consent, in writing, of two freeholders in the county of Essex, State of New Jersey, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the proposal, they will, on its being so awarded, become bound as his sureties for its faithful performance. The consent above mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a freeholder in the county of Essex, and is worth the amount of the security required for the completion of the contract as stated in the proposals, over and above all his debts of every nature, and over and above his liabilities as bail, surety or otherwise; that he has offered himself as surety in good faith, and with an intention to execute the bond required by law. The undertaking of a guaranty of trust company, duly authorized to make contracts of suretyship in New Jersey, and of satisfactory standing, will be accepted in lieu of personal securities. The adequate and sufficiency of the security offered will be determined by the Essex County Park Commission.

The amount of security required is Twenty thousand dollars.

N. B.—The prices must be written in the proposal and also stated in figures, and all proposals will be considered as informal which do not contain bids for all items called for in these specifications, or which contain bids for items not called for therein. Permission will not be given for the withdrawal of any bid, and the right is expressly reserved by the Essex County Park Commission to reject any or all bids which it may deem prejudicial to the public interest.

These prices are to cover the furnishing of all the necessary materials and labor, and the performance of all the work as set forth in the specification and form of agreement, and the completion of the entire work.

The Engineer's estimate of the work to be done, and by which the bids will be tested, is as follows:

58,000 cubic yards excavation of earth.
3,200 lineal feet 6-inch vitrified pipe.
1,000 lineal feet 8-inch vitrified pipe.
250 lineal feet 10-inch vitrified pipe.
450 lineal feet 12-inch vitrified pipe.
200 lineal feet 15-inch vitrified pipe.
65 cubic yards brick masonry.
40 cubic yards concrete.
5,000 pounds cast-iron.
1,250 lineal feet 4-inch cast-iron water pipe.
1,350 lineal feet 1½-inch wrought-iron water pipe.
3,650 lineal feet 2-inch wrought-iron water pipe.
34 lawn hydrants.
400 cubic yards rubble foundation masonry.
550 cubic yards wall masonry.
22,000 square yards gravel walks.
300 square yards walk gutters.

The above mentioned quantities are approximate only.

The person or person to whom the contract may be awarded will be required to attend at the office of the said commission, with the sureties offered by him or them, and execute the contract within five days after written notice that the same has been awarded to his or their bid, and that the sureties offered by him or them have been approved by the commission, and in case of failure or neglect so to do, he or they will be considered as having abandoned it, and thereupon the work will be re-let or the contract awarded to another bidder.

Specifications, blank forms of proposals and further information can be obtained on application, and plans for the work inspected at the office of the Engineer of the Essex County Park Commission, 800 Broad street, Newark, N. J.

THE ESSEX COUNTY PARK COMMISSION,
26-1t. A. CHURCH, Secretary.

CAST-IRON WATER PIPE AND SPECIAL CASTINGS.

SYRACUSE, N. Y.

Sealed proposals will be received at the office of the Syracuse Water Board, No. 137 North State St., Syracuse, N. Y., until ten o'clock, A. M., of the 8th day of July, 1899, for furnishing and delivering on railway cars in the City of Syracuse, 415 tons of straight pipe and 20,000 pounds of special castings.

The entire delivery must be completed on or before Sept. 15, 1899. Blank forms of contracts, specifications, bonds, conditions and proposals can be obtained at the Engineer's office of the Syracuse Water Board, No. 137 North State St., in said city.

Proposals should be endorsed: "Tenders for Water Pipe," and be addressed to William R. Hill, Chief Engineer of Syracuse Water Board, Syracuse, N. Y. 26-1t

PIER.

NORTHAMPTON, MASS.

Proposals will be received at the office of the Clerk of the Connecticut River Bridge Committee of the city of Northampton, Mass., until July 6th, 1899, at 12 o'clock, noon, for the construction of a pier in the Connecticut River Bridge.

Plans and specifications may be seen at the office of the Committee's Clerk. Each bid must be accompanied by a deposit or certified check in the sum of $500.

L. M. THACHER,
26-2t City Engineer.

COMMONWEALTH OF MASSACHUSETTS.

METROPOLITAN WATER BOARD.

IMPROVEMENT OF SPOT POND.

Sealed proposals will be received at the office of the Metropolitan Water Board, 3 Mt. Vernon Street, Boston, Mass., until 2:30 o'clock p. m., of Monday, July 17, 1899, for two separate contracts, Nos. 174 and 175, for excavating soil, building embankments, grading shores and doing other work in connection with the improvement of Spot Pond in the town of Stoneham, Mass. Contract No. 174 calls for 130,000 cubic yards of earth excavation, 200 cubic yards of rock excavation, and 2,200 cubic yards of rip-rap; and Contract No. 175 calls for 221,000 cubic yards of earth excavation, and 600 cubic yards of rip-rap.

Pamphlets containing further information for bidders, forms of proposal, contract and specifications will be mailed to contractors who apply to the Chief Engineer, or may be obtained at his office, 3 Mt. Vernon Street, on and after July 5. Plans may also be seen at his office on and after the same date. The printed forms must be used in making proposals. The Board reserves the right to reject any or all proposals, and to accept the proposals deemed best for the Commonwealth.

HENRY H. SPRAGUE, Chairman.
WILMOT R. EVANS,
HENRY P. WALCOTT,
Metropolitan Water Board.
FREDERIC P. STEARNS, Chief Engineer.
WILLIAM N. DAVENPORT, Secretary.
Boston, June 27, 1899. 26-2t

STEEL BRIDGES.

NOTICE TO BRIDGE CONTRACTORS.

LIMA, OHIO.

Sealed proposals will be received by the City Clerk until 12 o'clock noon, of Thursday, July 6th, 1899, for the construction of two steel bridges over Ottawa River.

Each bridge shall be approximately as follows: Clear span, 80 feet; clear roadway, 26 feet; two sidewalks, each 7 feet clear; capacity of roadway and sidewalks (live load), 100 pounds per square foot; factor of safety, 4 to 6; steel joists.

Bidders must submit with their proposals drawings and specifications of bridges bid upon, and a preliminary bond or certified check on some Lima bank, in sum of $500, must accompany each bid.

25-2t C. E. LYNCH, City Clerk.

CLAY EXCAVATION

CINCINNATI, O.

Earnshaw & Punshon, Engineers, Glenn Building, Cincinnati, O., will receive proposals from steam shovel contractors up to noon July 15, 1899, for removing one hundred thousand yards clay excavation work within city limits. 26-2t

U. S. ENGINEER OFFICE, Army Building, New York, June 28, 1899.—Sealed proposals for removal of wreck of barge "David Crockett," New York Harbor, will be received here until 12 o'clock noon, July 28, 1899, and then publicly opened. Information furnished on application. H. M. ADAMS, Maj., Engrs. 26-4t

U. S. ENGINEER OFFICE, Tampa, Fla., June 29, 1899.—Sealed proposals will be received here until 11 A. M., July 31, 1899, and then publicly opened, for dredging and removal of rock in Hillsboro Bay and River, Fla. Information furnished on application. HENRY JERVEY, Capt., Engrs. 26-4t

WATER-WORKS.

MICHIGAN CITY, IND.

Sealed proposals for the construction of a Water-Works System at Michigan City, Indiana, will be received at the office of the Secretary of Lake Michigan Water Company, at Michigan City, Indiana, until noon of the 30th day of June, 1899.

A pumping well and intake pipe 3,000 feet long, extending into Lake Michigan.

A river crossing and about 1,000 feet of 20-inch force main, and about 450 feet of 20-inch suction pipe, all in place and completed.

Each bid must be accompanied by a certified check for $1,000 as a guarantee of good faith, made payable to Martin T. Krueger, Secretary Lake Michigan Water Company.

Specifications may be obtained and the plans seen at the office of the City Civil Engineer of Michigan City, and also at the office of the Lake Michigan Water Company.

Proposals should be addressed to
MARTIN T. KRUEGER, Secretary.
25-2t Michigan City, Ind

PROPOSALS FOR GRADING CERTAIN STREETS AND AVENUES.—Office of the Commissioners, D. C.—Washington, June 22, 1899.—Sealed proposals will be received at this office until 12 o'clock, noon, on Saturday, July 8, 1899, for grading certain streets and avenues. All necessary information will be furnished on application to the Engineer Commissioner, D. C. JOHN B. WIGHT, JOHN W. ROSS, LANSING H. BEACH, Commissioners, D. C. 26-1t

U. S. ENGINEER OFFICE, Savannah, Ga., June 22, 1899.—Sealed proposals for Portland cement delivered at Tybee Island, Ga., will be received here until 12 o'clock, noon, Eastern standard time, July 22, 1899, and then publicly opened. Information furnished on application. CASSIUS E. GILLETTE, Capt., Engrs. 26-3t

U. S. ENGINEER OFFICE, Norfolk, Va., June 19, 1899.—Sealed proposals for dredging and bank protection in waterway from Norfolk, Va., to Sounds of N. C., will be received here until 12 o'clock, July 21, 1899, and then publicly opened. Information furnished on application. THOS. L. CASEY, Maj., Engrs. 26-2t—eow

U. S. ENGINEER OFICE, Oswego, N. Y., June 21, 1899.—Sealed proposals for dredging in Ogdensburg Harbor, N. Y., will be received here until noon July 24, 1899, and then publicly opened. Information furnished on application. GRAHAM D. FITCH, Capt., Engrs. 26-4t

PROPOSALS FOR THE CONSTRUCTION OF SEWERS.—Office of the Commissioners, D. C.—Washington, D. C., June 24, 1899.—Sealed proposals will be received at this office until 12 o'clock M., July 29, 1899, for constructing sewers in the District of Columbia, as follows: Two sections of the east side intercepting sewer; extension of boundary sewer; Quincy street sewer, Petworth; extension of sewer in Trinidad avenue; sewers in Lanier Heights subdivision. Specifications and blank forms of proposals may be obtained at this office. The right is reserved to reject any and all bids or parts of bids. JOHN B. WIGHT, JOHN W. ROSS, LANSING H. BEACH, Commissioners, D. C. 26-1t

U. S. ENGINEER OFFICE, 601 18th Street, N. W., Washington, D. C., June 28, 1899.—Sealed proposals for dredging in Occoquan Creek, Nomini Creek, and Lower Machodoc Creek, Va., will be received here until 12 M., July 28, 1899, and then publicly opened. Information furnished on application. CHAS. J. ALLEN, Lieut. Col., Engrs. 26-4t

U. S. ENGINEER'S OFFICE, Newport, R. I., June 15, 1899.—Sealed proposals for Dredging Newport Harbor, R. I., will be received here until 11 a. m., July 22, 1899, and then publicly opened. Information furnished on application. D. W. LOCKWOOD, Maj., Engrs. 26-4t

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ENGINEERING NEWS

AND

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No. 26.

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Special Offer	"	"	"	"	"	11,	"	"	xxvi
Free Pumps	"	"	"	"	"	18,	"	"	xxvi
Coffer Dam Pumps . . .	"	"	"	"	"	25,	"	"	xxvia
Manhole Pumps	"	"	"	"	June	1,	"	"	xxvia
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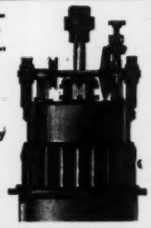

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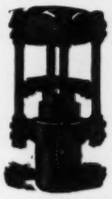

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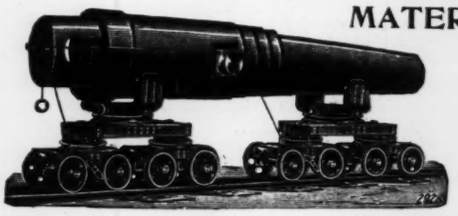

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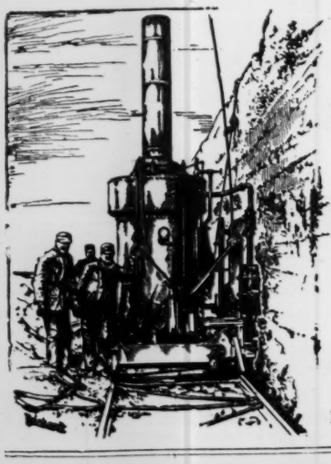

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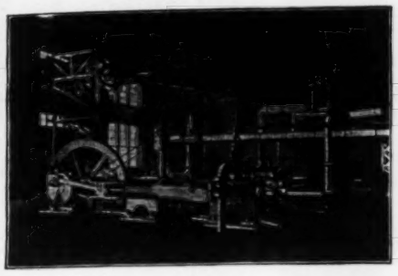

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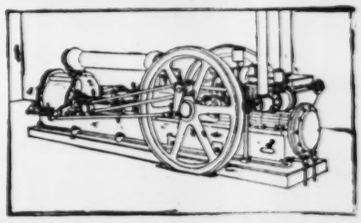

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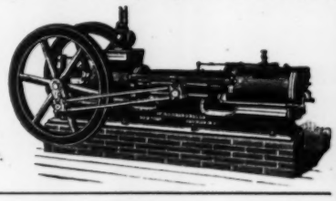

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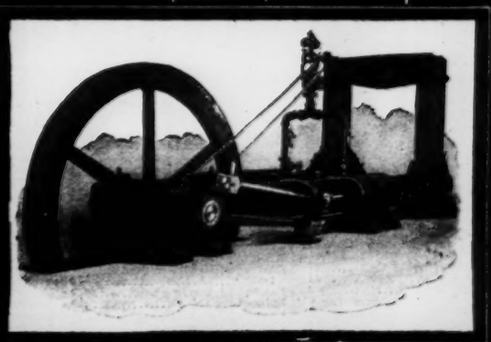

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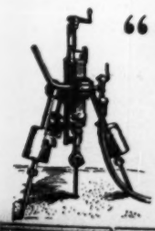

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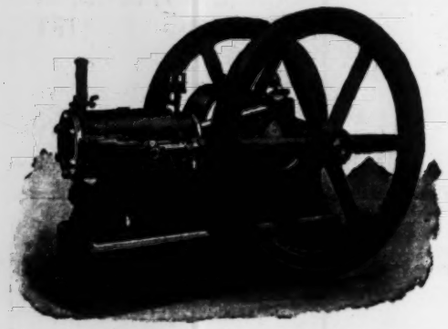

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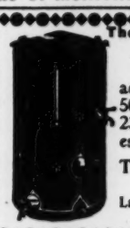

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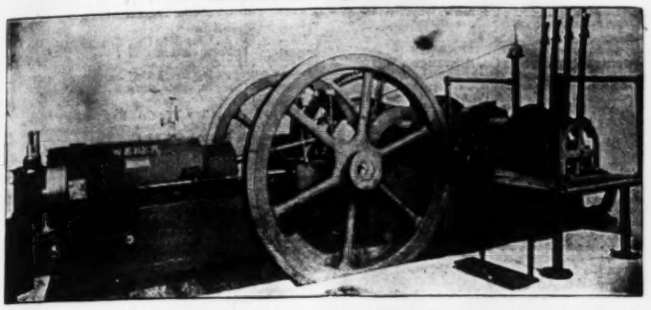

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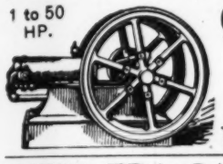

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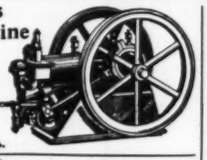

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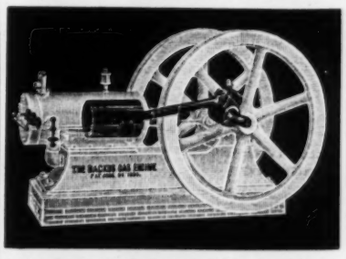

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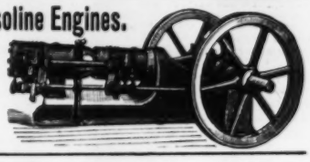

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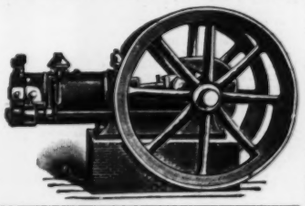

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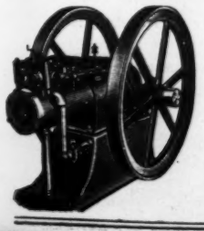

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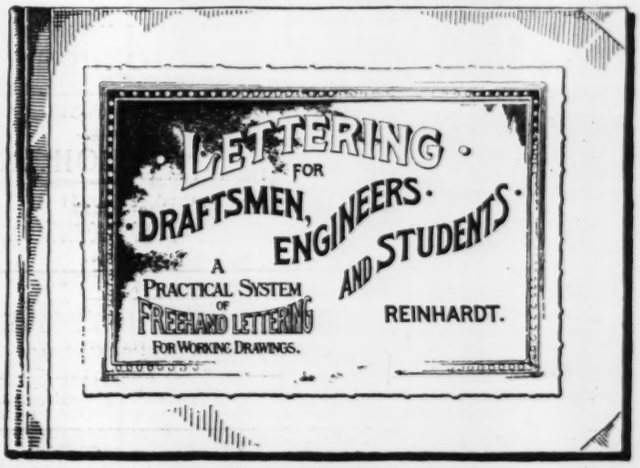

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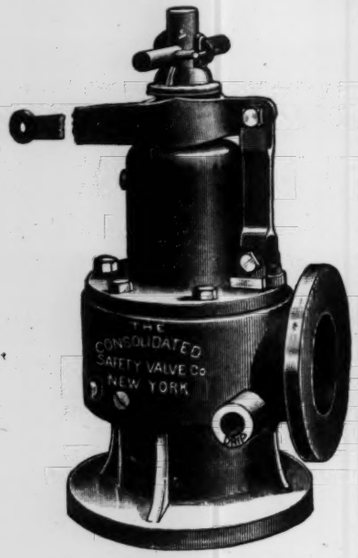

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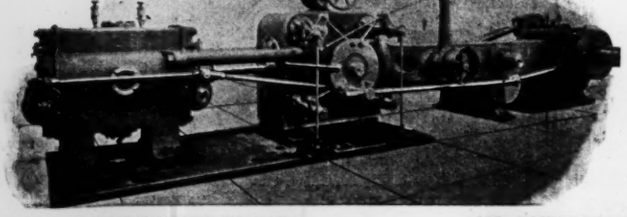

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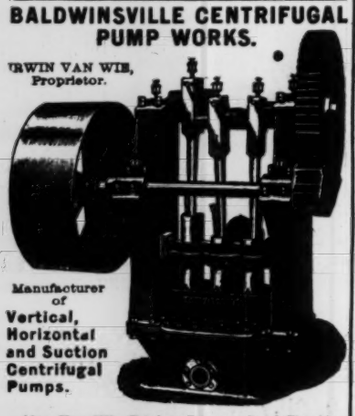

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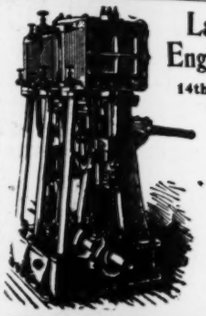

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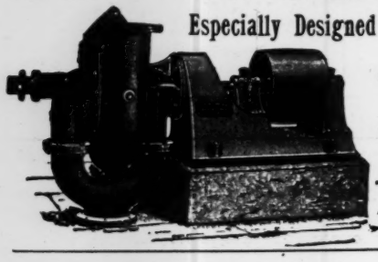

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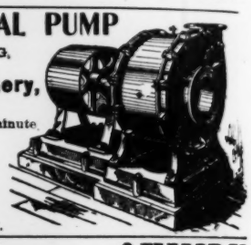

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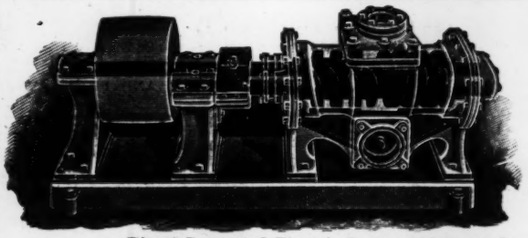

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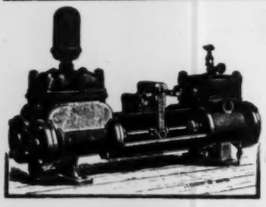

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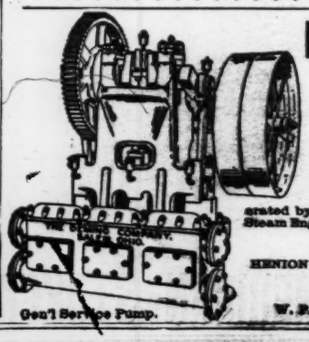

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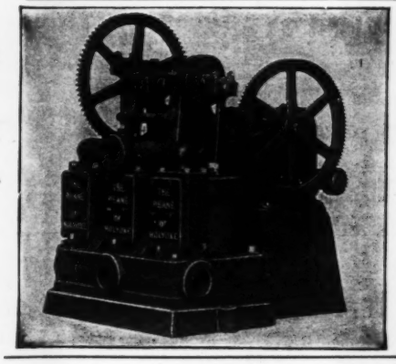

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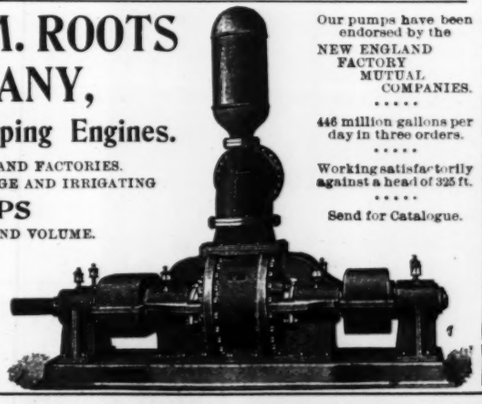

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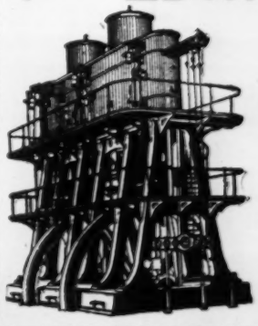

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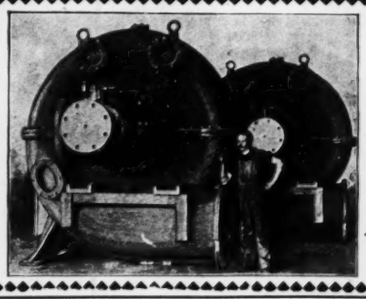

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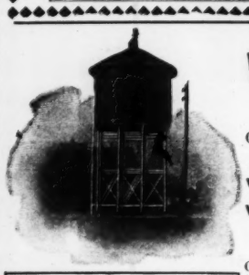

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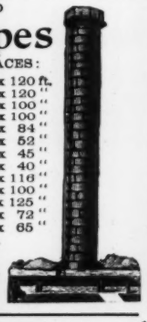

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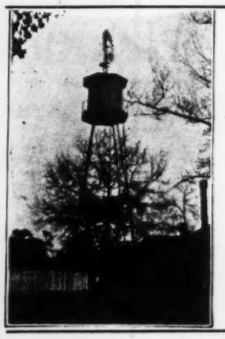

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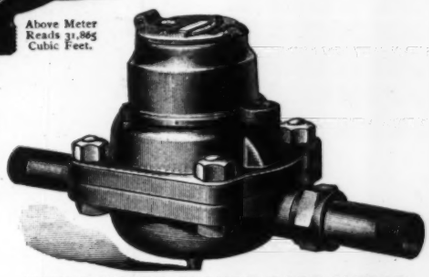

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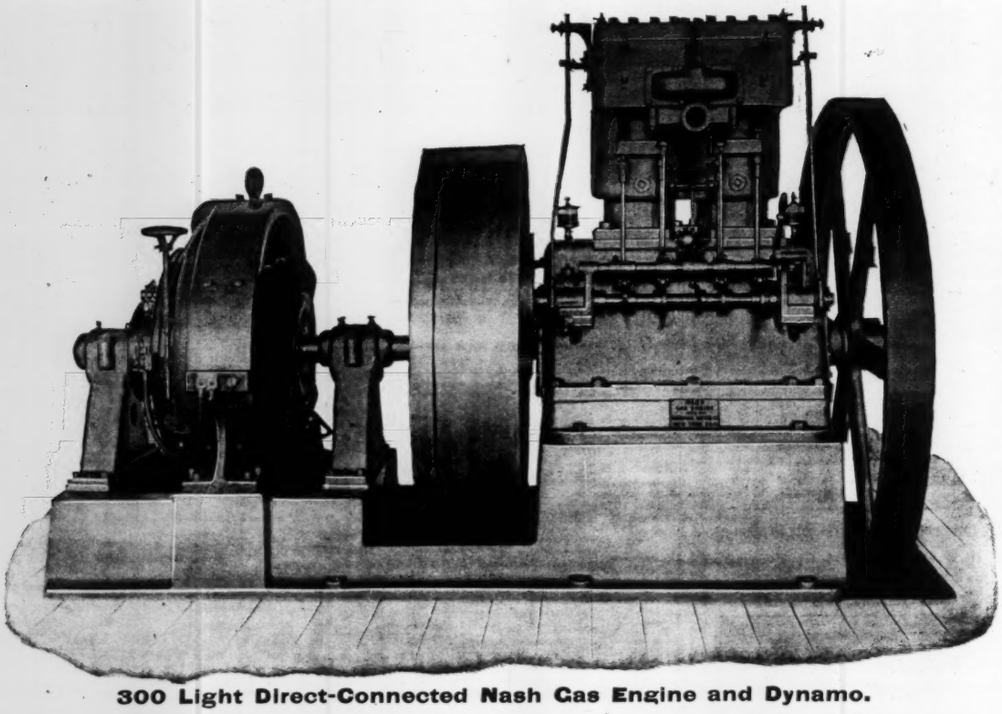

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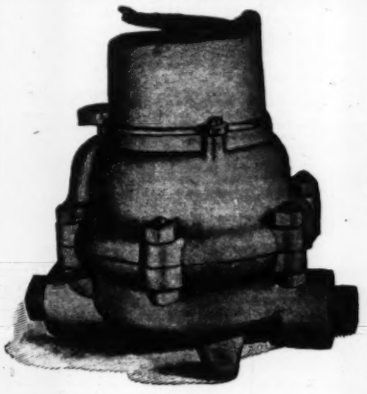

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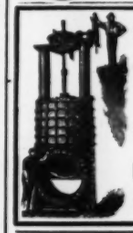

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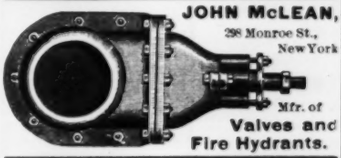

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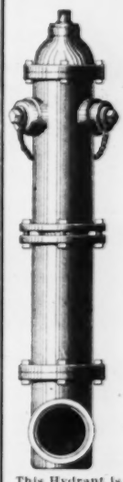

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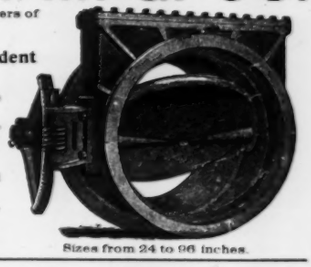

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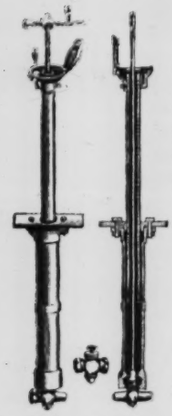

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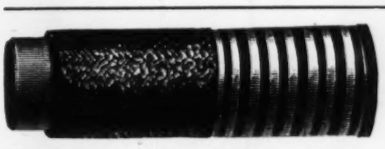

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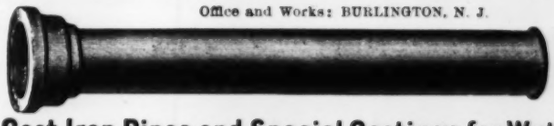

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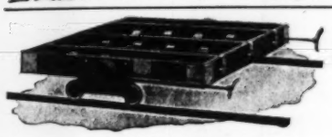

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WANTED.—Experienced foreman to take charge of erection of manufacturing plant. Should be acquainted also with general hydraulic work as applied to factories. Address, stating experience and terms, "FOREMAN," Engineering News, New York. 21-tf

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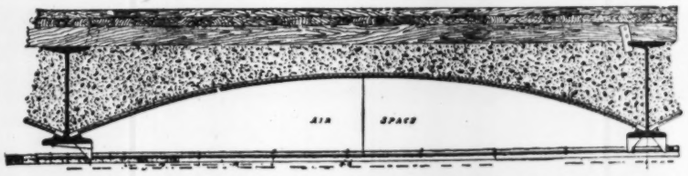

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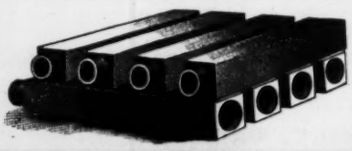

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NEW DRAINAGE SYSTEM FOR NEW ORLEANS, LA.

Sealed proposals will be received at the office of the Drainage Commission of New Orleans, La., Room No. 20, City Hall, up to noon of JULY 5, 1899, for the construction of the following works, a separate bid being required for each of the separate contracts as indicated below:

CONTRACT E.

Melpomene Pumping Station No. 1, and Motor for Jourdon Avenue Pumping Station No. 5.

This bid shall include the erection of one pumping station complete, with foundations, buildings, suction, discharge and approach basins, pumps, electric motors and transmission lines to central power station.

Deposit of five hundred ($500) dollars in cash or certified check to accompany bid as a guarantee of good faith. Bond of successful bidder, twenty-five thousand ($25,000) dollars.

CONTRACT F.

Lined and Covered Canals, viz.: Third Street Canal and Carondelet Canal.

Bids for this work will be at a price per unit of material, whether excavated or used in construction. The work will include not less than 8,000 linear feet of canal, from five to twenty feet wide, and six to twelve feet deep.

Deposit of one thousand ($1,000) dollars in cash or certified check. Bond of successful bidder, fifty thousand ($50,000) dollars.

CONTRACT G.

Open and Unlined Canals—Which bid shall be for the enlargement of existing canals, involving the excavation of approximately 175,000 cubic yards at a price per unit of material excavated.

Deposit two hundred ($200) dollars in cash or certified check. Bond of successful bidder six thousand ($6,000) dollars.

CONTRACT H.

Algiers Pumping Station No. 8.

This bid shall include the erection and installation of one pumping station complete, with foundations, suction and discharge basins, the furnishing and installing of one pump, and the removal of the boilers and engine from the station now in operation, and their erection and installation in this station.

Deposit three hundred ($300) dollars in cash or certified check. Bond of successful bidder ten thousand ($10,000) dollars.

Plans and specifications can be seen at the office of the Drainage Commission, after May 8, 1899.

The right is reserved to reject any and all bids, or to accept the proposal of any one bidder for the whole work embraced in said contracts E, F, G and H, in case the aggregate of said bid for the work under all of said contracts shall be less than the aggregate cost of said work under any combination of amounts of separate bids.

R. M. WALMSLEY, President.
A. SCHREIBER, Secretary. 18-9t

U. S. ENGINEER OFFICE, Duluth, Minn., June 6, 1899.—Sealed proposals for building extension to breakwater at Presque Ile Point, Marquette, Mich., will be received here until noon, July 6, 1899, and then publicly opened. Information furnished on application. CLINTON B. SEARS, Major, Engrs. 23-4t

U. S. ENGINEER OFICE, Flood Building San Francisco, Cal., June 7, 1899.—Sealed proposals for removing rocks in San Francisco Harbor, Cal., will be received here until 12 o'clock, noon, August 12, 1899. Information furnished on application. W. H. HEUER, Major, Engrs. 23-4t

Other Proposals Pages XXVI-XXVIII.

A Lundell Power Motor for driving any kind of machinery offers many advantages over other methods. The electric system of operating machinery is more flexible, simple, safer and cleaner than any other. *It is more economical.* We will be glad to correspond with operators of machinery, explaining in detail the superiority of our motors. Write for Catalogue 581.

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Locomotives: Contractors': 2 Dickson, 2 Porters, 36-inch gage; No. 1 condition.
1 Souther Steam Shovel, 2-yd dipper.
1 Marion, Style A, 1½-yd. dippers.
1 Little Giant, 1-yd. dipper; delivery ten days after ordered.
4 Marion side and center Plows.
142 1½-yd. Dump Cars; dump both sides, good condition.
30 K. & J., 3 yd. 36-inch gage Dump Cars, good order.
100 5 to 8 yards Side Dump Cars, standard gage, best car ever built. Write for photograph.
2 New Era Graders, one new. 3 Sullivan Channelers.
1 Camp Outfit, complete, for fifty men.
20 lb. Relaying Rail for 3½ miles of track.
Contract 18' Trois, Complete Blacksmith Outfit.
1 6 ton Byers' Geared Locomotive, nearly new.
2 8 ton Locomotives, 15 and 16 tons respectively.
Several Standard and Narrow Gage Switching Engines, good as new.
Kelly Steam Road Rollers, 15-ton, 1 10-ton, good condition.
40 Flat Cars.
58 1-yd Hopper Bottom, Side Dump Cars.
75-2½ 3-yd., 36 in. gage Dump Cars, No. 1 condition; cheap.

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WANTED. Contractors and Owners of other kinds of machinery to send us complete lists and specifications of whatever they have on hand which they wish to TURN INTO CASH.

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WRITE US. Bankers: America National Bank of Chicago.

IRON OR STEEL WATER PIPE.

LANSINGBURG, N. Y., June 20, 1899.

Sealed proposals will be received at the office of the Board of Water Commissioners, Village of Lansingburg, N. Y., until 8 o'clock p. m., Thursday, July 6th, 1899, for Steel, Refined Iron or Cast-Iron Water Pipe, 14 inches inside diameter, of the following approximate lengths:

13,000 ft. to be under a head of 100 ft.
11,000 ft. to be under a head of 200 ft.

And about 17 tons of Iron Specials, according to specifications, which will be furnished upon application to the engineer.

Proposals to be indorsed either "Steel," "Refined Iron," or "Cast-Iron Water Pipe," according to bid submitted.

Bidders must use the printed forms furnished with the specifications.

By direction of the Board.
C. E. HICKS, Engineer.
25-2t

SEWERS.

DEPEW, N. Y.

Sealed bids will be received by the Board of Sewer Commissioners until 2 p. m., July 8th, for constructing 17,000 feet of lateral sewers.

Plans and specifications with
ALBERT F. KRAUSE, Resident Engineer, Depew, N. Y.
Or, C. N. SULLIVAN, Village Clerk. 26-1t

U. S. ENGINEER OFFICE, Equitable Building, Memphis, Tenn., June 2, 1899.—Sealed proposals, in triplicate, for constructing, enlarging and repairing levees in Upper and Lower St. Francis, White River, and Upper Yazoo Levee Districts will be received here until 12 o'clock, noon, July 3, 1899, and then publicly opened. Information furnished on application. E. EVELETH WINSLOW, Capt., Engrs. 23-4t

SETTLING BASIN.

NOTICE TO CONTRACTORS.

PHOENIXVILLE, PA.

Sealed proposals addressed to B. H. Willauer, Superintendent Water-Works, and properly endorsed, will be received until Thursday, June 29th, 1899, at 8:00 o'clock p. m., and opened immediately thereafter, for the construction of a 3,500,000-gallon settling basin, to be lined with rock asphalt, and for certain improvements and extensions to the pumping station.

Plans can be seen and specifications secured at the office of the Superintendent of Water-Works, at Phoenixville, or at the office of the Consulting Engineer, 137 Broadway, New York City.

A certified check (the right to deposit which is reserved) or currency to the amount of $5,000.00 must accompany each proposal.

The council reserves the right to reject any or all bids or to accept that one which in their judgment is for the best interest of the Borough of Phoenixville.

E. L. BUCHWALTER, President of Council.
N. J. WAITNEIGHT, Chairman Water Committee.
ALEXANDER POTTER, Consulting Engineer,
25-2t 137 Broadway, New York City.

U. S. ENGINEER OFFICE, D. S. Morgan Building, Buffalo, N. Y., June 10, 1899.—Sealed proposals for construction of Timber and Concrete Pier and Timber Crib Jetty at Erie Harbor, Pa., will be received here until 11 o'clock a. m., July 12, 1899, and then opened. Information furnished on application. T. W. SYMONS, Maj., Engrs. 24-4t

U. S. ENGINEER OFFICE, 537 Congress St., Portland, Me., May 24, 1899.—Sealed proposals for dredging Carvers Harbor, Me., will be received here until 12 M., July 7, 1899, and then publicly opened. Information furnished on application. S. W. ROESSLER, Maj., Engrs. 23-4t

CLAY CULVERT PIPE
FOR
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Better and Stronger than Iron Pipe.
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Water-Works Intakes a Specialty.
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New York Office, 160 Broadway. | St. Louis Office, 302 Bank of Commerce Bldg.
Chicago Office, 319 The Rookery. | Minneapolis, Minn., Agency, Room 304, Phoenix Bldg.
Pittsburg Agency, 405 Fourth Ave. | Milwaukee, Wis., Agency, 379 Broadway.

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Pittsburg Office, Westinghouse Building.
New York Office, Havemeyer Building
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The Designing, Construction, and Maintenance of Sewerage Systems.
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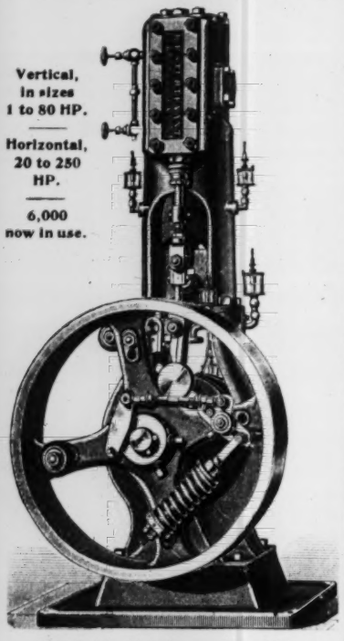

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CAST-IRON PIPE AND SPECIALS

ST. LOUIS, MO.

Sealed proposals will be received in the office of the Board of Public Works, acting as Water Commissioners in the City of Kansas City, Mo., until 10 o'clock a. m. on Friday, July 7th, 1899, for the furnishing of all material, specials and valves, and the constructing of six thousand (6,000) feet, more or less, of thirty (30) inch, 250-lb. per ft. cast-iron pipe, as per plans and specifications furnished upon application to the Kansas City, Mo., Water Dept., D. W. Longwell, Supt., Kansas City, Mo.

Certified check for one thousand ($1,000) dollars to accompany all bids.

Surety company bond of sixty (60) per cent. of contract price, acceptable to City Comptroller, will be required of successful bidder.

The Board reserves the right to reject any and all bids.

The Board reserves the right to waive any informalities in bids where it is to the interest of the city to do so.

R. M. GODFREY, Secretary.

Kansas City, Mo., June 10, 1899. 24-3t

U. S. ENGINEER OFFICE, Newport, R. I., May 29, 1899.—Sealed proposals for repairing Breakwater at Block Island, R. I., will be received here until 11 a.m., July 10, 1899, and then publicly opened. Information furnished on application. D. W. LOCKWOOD, Maj., Engrs. 24-4t

DRAINING SWAMP OR MEADOW LANDS.

NEWARK, N. J.

Sealed proposals will be received by the Board of Street and Water Commissioners of the city of Newark, N. J., on Thursday, July 20, 1899, between the hours of 3.30 o'clock and 3.45 o'clock p. m., at the place of meeting of the said Board, Nos. 128 and 130 Halsey street, in the said city of Newark, for the work of draining the swamp or meadow lands lying within the Ninth, Tenth and Twelfth Wards of the said city of Newark, pursuant to the provisions of an act entitled "A supplement to an act entitled 'An act to authorize the corporate authorities of cities and towns to drain meadow and swamp lands lying within their corporate limits,' approved April twenty-first, one thousand eight hundred and seventy-six," which supplement was approved March 20, 1899. Said sealed proposals to be accompanied by separate proposals for the repairing, rebuilding, maintenance and operation of said works or system of drainage for a term of ten years with the annual cost thereof.

Said proposals must be accompanied by plans showing the entire district to be drained and the location of tide-banks, dikes, dams, drains, pumping stations, sluices, sewer basins or other works and appurtenances to be built and constructed, together with detailed drawings and descriptions sufficient to make clear the essential features of the works which the bidder proposes to construct.

The water surface in the drains or ditches must be maintained at a level not less than six feet below the city datum at all points within the area of said swamp or meadow lands.

Pumping plants must be so arranged that the full capacity of the plant may be promptly brought into use in case of sudden storms. They must have a capacity to pump at least 900 cubic feet of water hourly for each acre of catchment tributary to the pumping station, and must show a duty test of at least 50 million feet pounds for each one hundred pounds of dry Cumberland coal or its equivalent in fuel consumed.

All tide-banks, canals, ditches, pumping stations and other works must be so located that the lands necessary for their construction and maintenance may be acquired and owned by the city.

Bidders must state the time in which the works included in their plan will be completed.

Bidders must state the cost for the entire work, and the periods of time in which payments thereon are required to be made to them by the city.

Bidders must also state the cost for the completion of any portion of the work, including a distinct drainage district, together with the periods of time in which payments thereon are to be made to them by the city.

Bidders must also state the cost for the annual maintenance, repairing and operation of the entire system of drainage works or of a complete drainage district, for a period of ten years from the date of the completion of the work, and the period of time in which payments thereon are to be required to be made to them by the city.

The said Board of Street and Water Commissioners reserves the right to reject any or all proposals, plans and estimates submitted under this advertisement.

Each bidder can procure a map of the city showing the extent and relative location of the swamps or meadow lands contained within the respective wards upon application in the Engineer's office at the City Hall.

In addition to the above, and with the object in view of obtaining the best plans for reclaiming, draining and improving the swamp or meadow lands within the corporate limits of the city of Newark, the Board of Trade in this city, through the Board of Street and Water Commissioners, offers the following prizes, namely: The sum of five hundred dollars ($500) for the best plans, with accompanying descriptions and estimates; three hundred dollars ($300) for the second best, and two hundred ($200) for the third best.

The plans are to be examined and their respective merits determined by two persons, one to be selected by the said Board of Trade and one by the said Board of Street and Water Commissioners, and upon the failure of said two persons to agree, they may select a third, when the decision of any two shall be final. Each competitor must inclose his name and address and a chosen number in a small sealed envelope, which is to accompany the plans and descriptions and estimates, all to be inclosed in a large sealed envelope or package, which is also to be marked with the same number as contained in the small sealed envelope. The small sealed envelope will not be opened until the plans, descriptions and estimates have been examined by the judges and their respective merits determined, whereupon the prize will be awarded. The plans, descriptions and estimates are to remain the property of the Board of Street and Water Commissioners.

WM. E. GREATHEAD,
Clerk of the Board.

25-4t Per ERNEST ADAM,
Engineer of Street and Sewer Departments.

BRICK PAVING

NOTICE TO CONTRACTORS.

ROME, N Y.

Sealed proposals will be received by the Common Council of the City of Rome, N. Y., at its regular meeting, held in the Common Council Chamber at 7:30 o'clock p. m., on the 3d day of July, 1899, for the construction of about 10,000 square yards of brick paving, together with the necessary storm sewers and accessories.

The plans can be seen and specifications and blank forms obtained at the office of the City Engineer in the City Hall. No proposal shall be considered which shall not be accompanied by a bond for $1,000, with sureties, or by a certified check for $1,000, both to be approved by the Common Council, conditioned that if the proposal be accepted, the person proposing will enter into the contract upon the terms proposed. Bids must be sealed and addressed to the Common Council of the City of Rome, N. Y., and endorsed on the outside of the envelope containing them "Proposal for Brick Paving."

FRED. A. COLEMAN,
25-2t City Engineer.

POSTPONEMENT NOTICE.

The date for receiving bids for the above work has been postponed until July 6.

FRED. A. COLEMAN,
26-1t City Engineer.

SEWERS.

HACKENSACK, N. J.

Sealed proposals will be received by the Hackensack Improvement Commission at the Commission Rooms, Mercer St., until 8 p. m., Monday, July 10, 1899, for constructing

About 465 ft. of flat top sewer, 5 ft. wide;
" 300 " " " " 6 " "
" 568 " of 24-in. pipe sewer;
" 538 " " 18-in. " "

together with manholes, catchbasins, etc.

Drawings and specifications may be seen and blank forms of proposals obtained at the office of Lemuel Lozier, Engineer, No. 1 Main St., Hackensack, after June 28.

Proposals must be made upon the blank forms furnished.

All proposals shall be accompanied by a certified check for Five Hundred ($500) Dollars, drawn to the order of the Hackensack Improvement Commission, as surety that if proposal is accepted, contract will be entered into.

The Hackensack Improvement Commission reserves the right to reject any and all bids.

M. E. CLARENDON,
President.
JACOB BAUER,
Secretary. 25-2t

BRICK AND ASPHALT PAVING.

CHILLICOTHE, O.

Bids are asked until July 5th for paving with brick and asphalt.

H. M. REDD,
25-2t City Engineer.

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ARCHITECTS' SPECIFICATIONS.

It is a common practice to specify for exterior painting a priming coat of lead or of ochre and oil, succeeded by one or two coats of pure lead; though sometimes the more careful architects will order the addition to the finishing coat of a certain proportion of zinc "to hold the lead in place." It is generally better practice to use a goodly proportion of **ZINC WHITE** throughout, from which the best result will be obtained if the materials are thoroughly combined by mechanical grinding.

For interior work specifications should require zinc to the exclusion of lead. The result will be more satisfactory in beauty, durability, healthfulness and economy, as no paint containing an appreciable proportion of lead will hold its color in an atmosphere where gas or coal is burned, or where there is any trace of effluvium from closets, etc., and all lead paints are liable to "chalk" with the production of poisonous dust.—THE NEW JERSEY ZINC COMPANY, 52 Wall Street New York City.

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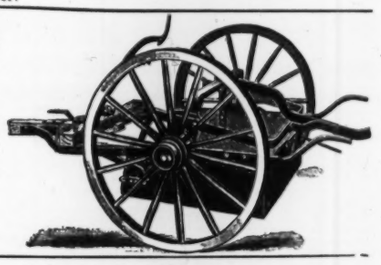
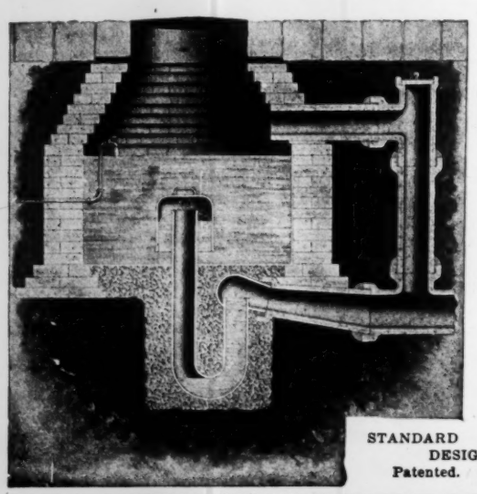


Western Wheeled Scraper Co.,
AURORA, ILL.



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For Flushing Street Sewers and for Sub-Soil Irrigation.

SIMPLEST AND MOST RELIABLE SIPHON MADE.

Received Highest Award at World's Columbian Exposition, 1893, for Simplicity of Construction, Efficiency and Reliability.

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We guarantee every Siphon to be absolutely reliable, no matter how small the stream may be.

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EAST ORANGE, N. J.

PROPOSALS for the Construction of a Storm Water Conduit or Sewer in the Valley of Black Brook, East Orange, Essex County, N. J.

Sealed proposals for the above work, endorsed with the above title, also with the name or names of the person or persons making the same, and the date of presentation, will be received by the Township Committee of East Orange, New Jersey, at their public meeting room, No. 388 Main street, East Orange, N. J., on the tenth day of July, 1899, at eight o'clock p. m. The proposals must be delivered to Mr. Stephen M. Long, Township Clerk, not later than the date and time named, as no proposal received after that time will be opened or considered.

Bidders are required to state in their proposals, under oath, their names and places of residence; the names of all persons interested with them therein; and if no other person be so interested, they shall distinctly state the fact.

The proposal must be verified by the oath, in writing, of the party making such proposal, that the several matters therein stated are in all respects true. When more than one person is interested in the proposal, the verification must be made by all the parties interested.

Each proposal shall be accompanied by the consent, in writing, of two freeholders in the County of Essex, State of New Jersey, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the proposal, they will, on its being so awarded, become bound as his sureties for its faithful performance; and that if he shall omit or refuse to execute the same, they will pay to the Inhabitants of the Township of East Orange any difference between the sum to which he would be entitled on its completion and that which the Inhabitants of the Township of East Orange may be obliged to pay to the person to whom the contract may be awarded at any subsequent or other letting; the amount in each case to be calculated upon the estimated amount of work by which the bids are tested. The consent above mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a freeholder in the County of Essex, and is worth the amount of the security required for the completion of the contract as stated in the proposals over and above all his debts of every nature, and over and above his liabilities as bail, surety or otherwise; that he has offered himself as surety in good faith, and with an intention to execute the bond required by law. The undertaking of a guaranty or trust company, duly authorized to make contracts of suretyship in New Jersey, and of satisfactory standing, will be accepted in lieu of personal sureties. The adequacy and sufficiency of the surety offered will be determined by the Township Committee of the Township of East Orange.

The amount of security required is twenty thousand dollars.

N. B.—The Price must be written in the proposal, and also stated in figures, and all proposals will be considered as informal which do not contain bids for all items called for in these specifications, or which contain bids for items not called for therein. Permission will not be given for the withdrawal of any bid, and the right is expressly reserved by the East Orange Township Committee to reject any or all bids which may deem prejudicial to the public interests.

ESTIMATE OF QUANTITIES.

Approximate estimate of the work to be done is as follows:

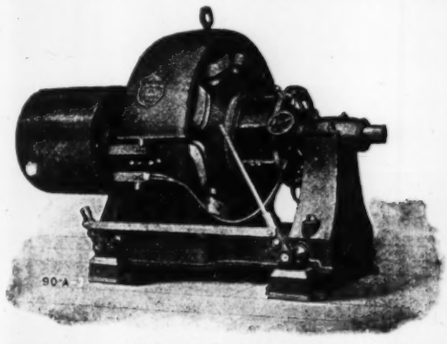
Bailing and draining.
Rubble masonry and appurtenances:
11 cubic yards masonry.
24 lineal feet blue stone coping.
10 anchors.
Concrete—1,200 cubic yards.
Timber foundation—80 thousand, B. M.
Rock excavation—850 cubic yards.
Sewer 5 feet 6 inches in diameter—1,600 lineal feet.
Sewer 5 feet in diameter—2,100 lineal feet.
Sewer 4 feet 9 inches in diameter—1,340 lineal feet.
Sewer 3 feet 9 inches in diameter—700 lineal feet.
Sewer 3 feet 6 inches in diameter—540 lineal feet.
Pipe Sewer 1 foot 6 inches in diameter—1,500 lineal feet.
Manholes, 22.
Receiving Basins, 37.
Average length of connection to Receiving Basin, 65 feet.

Specifications, blank forms of proposals and further information, can be obtained on application, and plans for the work inspected at the office of the Engineer of the Township, Town Hall Building, No. 388 Main street, East Orange, N. J.

By order of the Township Committee.

STEPHEN M. LONG,
25-3t Township Clerk.

BULLETIN No. 0333 DESCRIBES THIS MACHINE.



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CONSTRUCTING SEWERS AND FURNISHING SEWER PIPE.

COLUMBUS, MISS.

Sealed proposals will be received by the Mayor and City Council, of Columbus, Miss., until 12 M., July 20th, 1899, for constructing pipe sewers and for furnishing sewer pipe. Extent of proposed work is three miles of pipe sewers from eight to twenty-two inches diameter.

For specifications, forms of proposals, etc., address the City Clerk.

W. D. HUMPHRIES, Mayor.
H. M. WADDELL, Cy. Clk.
J. L. LUDLOW, Engineer,
Winston, N. C. 26-3t

U. S. ENGINEER OFFICE, Equitable Building, Memphis, Tenn., June 3, 1899.—Sealed proposals, in triplicate, for furnishing Brush, Poles, Stone, Wire, Wire Strand, Silicon Bronze Wire, Wire Rope Clips, Staples and Manila Rope, will be received here until 12 o'clock, noon, July 5, 1899, and then publicly opened. Information furnished on application. E. EVELETH WINSLOW, Capt., Engrs. 23-4t

WATER-WORKS.

TO CONTRACTORS.

WILLIMANTIC, CONN.

Proposals for Power Pumping Machinery for the Willimantic Water-Works will be received at the office of Thomas J. Kelley, 762 Main Street, Willimantic, Conn., until 2 o'clock p. m., Monday, the 24th day of July, 1899.

Each bid must be signed by the bidder and accompanied by a certified check for $500, conditioned for the execution of the contract (with satisfactory sureties for its performance) within the time specified in this advertisement, in case the bid be accepted.

The person, persons, or corporation to whom the contract may be awarded will be required to appear at said office with the securities offered by him, them, or it, and execute the contract within six days (not including Sundays) from the date of the notification of such award and the preparation and readiness for signature of the contract; and in case of failure to do so, he, they or it, will be considered as having abandoned it, and the check will be forfeited to the City of Willimantic.

The sureties upon the bond for the contract must be satisfactory to the Water Committee of said city.

The amount of security required will be fixed by the Committee aforesaid after the bids are opened, said amount to be not less than one-fourth nor more than one-half of the amount of the contract.

The said Water Committee also expressly reserve the right to reject any or all bids should they deem it for the interest of the City of Willimantic to do so.

TIME OF COMPLETION.

Bidders are required to state in their proposals the date on or before which they will guarantee to have the pump erected and ready to run in its regular service, also the date when it shall be ready for final acceptance.

Copies of the contract and specifications can be procured of the said Water Committee.

WILLIAM D. GRANT,
THOMAS J. KELLEY,
ROBERT E. MITCHELL,
Water Committee of the City of Willimantic.

Dated at Willimantic, Conn., this 20th day of June, A.D., 1899. 25-2t

STEEL HIGHWAY BRIDGE.

CAMDEN, N. J.

Bids are wanted for the construction of a one-span (400-ft. long) steel highway bridge over Pensahankin Creek, between Camden and Burlington counties, on Park avenue.

Detailed plans and specifications can be had by sending fifty cents to Camden County's Collector's Office, at Camden, N. J.

Bids in accordance with said specifications only will be received, opened and immediately publicly read, at the Freeholders' Meeting in Camden, N. J., at the Court House, on Wednesday, July 12th, 1899, at 11 A. M.

By order of joint committees.

J. J. ALBERTSON,
26-2t County Engineer.

F. M. GIBSON, *President.* G. EVERETT HILL, *V. P. & Manager.* M. E. STONE, *Sec. and Treas.* WM. L. CHURCH, C. E., Engineer.

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IN CONSULTATION:
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HERBERT TATE.

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ETC., FOR
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WATER-WORKS.

COLUMBUS, MISS.

Sealed proposals will be received by the Mayor and City Council of Columbus, Miss., until 12 M., July 20th, 1899, for constructing a system of water-works in the City of Columbus, Miss., and for furnishing the materials for the same. Work will embrace approximately ten miles of pipe, standpipe, filtration plant, and other appurtenances.

Plans and specifications will be on file, and may be seen, at the office of the City Clerk, and copies of specifications, forms, etc., may be obtained from the City Clerk after July 1st, 1899.

The right is reserved to reject any or all bids.

W. D. HUMPHRIES, Mayor.
H. M. WADDELL, Cy. Clk.
J. L. LUDLOW, Engineer,
Winston, N. C. 26-3t

WATER-WORKS.

MENA, ARK.

Sealed proposals for furnishing material and constructing a system of water-works in the City of Mena, Polk County, Arkansas, are invited by the Board of Commissioners, until noon of the 15th day of July, 1899, at which time they will be publicly opened and read. Required: 2 pumps, 500,000 gals. capacity.
2 boilers,
300 tons cast-iron pipe,
1 steel standpipe, 80,000 gals.

S. L. LINDSAY, Chn. Com.
JOS. P. LANDES, Secy. 26-2t

PROPOSALS FOR EXCAVATING AND BORING.—U. S. Engineer Office, 735 N. Capitol St., Washington, D. C., June 10, 1899.—Sealed proposals will be received here until noon, July 10, 1899, and then publicly opened, for Excavating and Boring on site of new building for Government Printing Office. Information furnished on application. JOHN STEPHEN SEWELL, Lieut., Engrs. 24-4t

WATER-WORKS AND ELECTRIC LIGHT PLANT.

MONROE, N. C.

Sealed proposals will be received by the Mayor and Common Council of the City of Monroe, North Carolina, until 12 o'clock noon, July 20, 1899, for the machinery, apparatus, materials and supplies of every kind, for said "water-works and electric light plant," free on board cars Monroe, N. C., and delivered on the ground, and for any and all parts of the work in detail, according to specifications (which may be had on application) and maps, plans and drawings, which may be seen at the office of the Secretary in Monroe, or at the office of Geo. Cadogan Morgan, Engineer, No. 808 Royal Insurance Building, Chicago.

All proposals must comply with the requirements of the plans and specifications, and must be addressed to Hon. Jas. G. Covington, Mayor, and Common Council, care of Mr. S. R. Bundy, Secretary, Monroe, N. C., and marked "Proposal for Pumping Machinery," or any other part of the plant bid upon, and must be delivered to the Secretary at his office on or before the time stated above.

A certified (Clearing House) check for ten per cent. of the amount of bid, upon each part of the plant, made payable to the City Treasurer of Monroe, N. C., must accompany each and every proposal, which will be considered liquidated damages for breach of agreement, if the requirements in the way of contract and bond shall not be complied with within five days after awards have been made.

The Mayor and Council reserve the right to reject any and all proposals.

JAS. G. COVINGTON, Mayor.
Attest: S. R. BUNDY, Sec'y. 26-1t

U. S. ENGINEER OFFICE, Wilmington, Del., June 10, 1899.—Sealed proposals for Dredging in Appoquinimink, Smyrna and Murderkill rivers, Delaware, will be received here until noon, July 10, 1899. Also proposals for erection of Pile Dikes at mouth of Mispillion River, Del. Information furnished on application. WM. F. SMITH, U. S. Agent. 24-4t

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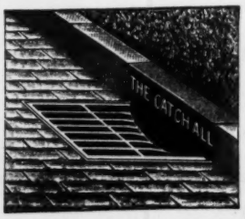

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U. S. ENGINEER OFFICE, Army Building, New York, June 12, 1899.—Sealed proposals for constructing and repairing dikes in Manasquam River, N. J., will be received here until 12 m., July 12, 1899, and then publicly opened. Information furnished on application. J. W. BARLOW, Col., Engrs. 24-4t

U. S. ENGINEER OFFICE, Mobile, Ala., June 20, 1899.—Proposals for furnishing and delivering Hydraulic Portland Cement, Gravel and Sand, at McGrews Shoal, Ala., received here until 12 o'clock, noon, July 20, 1899. Information on application. WM. T. ROSSELL, Maj., Engrs. 25-4t

U. S. ENGINEER OFFICE, Army Building, New York, June 19, 1899.—Sealed proposals for dredging in Bay Ridge and Red Hook Channels, N. Y. Harbor, will be received here until 12 m., July 19, 1899, and then publicly opened. Information furnished on application. H. M. ADAMS, Major, Engrs. 25-4t

PROPOSALS FOR SNAGBOAT AND HULL.—U. S. Engineer Office, Little Rock, Ark., June 16, 1899.—Sealed proposals for furnishing one steel snagboat and one steel hull will be received here until noon, July 15, 1899, and then publicly opened. Information furnished on application. ROBERT McGREGOR, 1st Lieut., Engrs. 25-4t

U. S. ENGINEER OFFICE, Boston, Mass., June 20, 1899.—Sealed proposals for dredging in Plymouth Harbor, Mass., will be received here until noon, July 21, 1899, and then publicly opened. Information furnished on application. CHAS. R. SUTER, Col., Engrs. 25-4t

U. S. ENGINEER OFFICE, Boston, Mass., June 27, 1899.—Sealed proposals for construction of rubble stone riprap on Long Beach, Plymouth Harbor, Mass., will be received until noon, July 29, 1899, and then publicly opened. Information furnished on application. CHAS. R. SUTER, Col., Engrs. 26-4t

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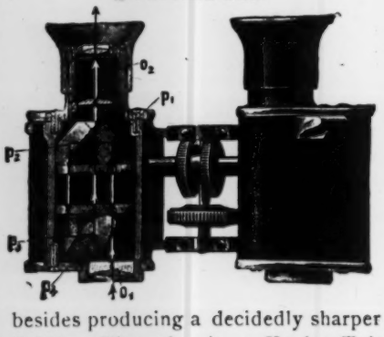

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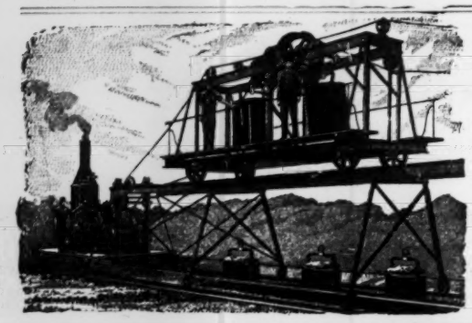

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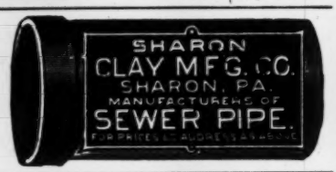

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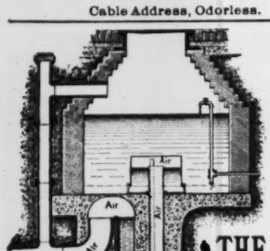

To Municipalities Requiring Siphons

Inasmuch as in nearly every instance we have, after the first trial order, received further orders for the number of Siphons required by the cities and contractors to whom we have shipped we have, for the purpose of further introducing our De La Hunt Siphons, decided to make the following proposition:

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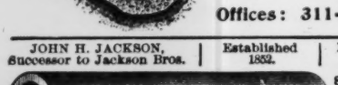

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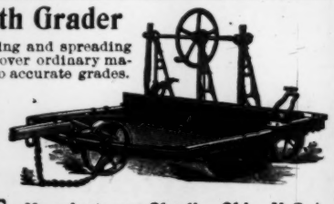

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Continued from Page 18.

ADVERTISERS' CLASSIFIED DIRECTORY.

Continued on Page 36.

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Olsen, Tinius, & Co., 500 N. 13th st, Philadelphia, Pa
Watson-Stillman Co., 204 E. 45d st, New York

Hydraulic Rams.
Pelton Water Wheel Co., New York & San Francisco

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Buffalo Steam Pump Co., No. Tonawanda, N. Y.

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Lunkenheimer Co., Cincinnati, Ohio

Inspection of Bridges and Rolling Stock.
(see Directory of Engineers, pp. 2 and 3.)

Inspection of Iron and Steel.
Conard & Rickard, 1004 High st, Burlington, N J
(see also Directory of Engineers, pp. 2 and 3.

Instruments (Engineering, Surveying, Drafting).
Aloe Co A. S., 517 Olive st, St. Louis,
Atteneder, Theo., & Sons, 945 Ridge ave, Phila., Pa
Beckman, L., 37 Adams st., Toledo, Ohio
Berger, C. L. & Sons, 9 Province st, Boston, Mass
Buff, Geo. L., 506 Atlantic av, Boston, Mass
Dietzgen, Eugene, Co., 183 Monroe st, Chicago
Eckel, F., 261 Washington st, New York
Engineers' Instrument Exchange, Scranton, Pa
Faith & Co., Washington, D C
Ferrari, Guido, 911 Vine st, Philadelphia, Pa
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Heller & Brightly, Spring Garden st. & Ridge ave, Phila
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Knight, F. C., & Co., 400 Locust ave, Philadelphia, Pa
Kolesch & Co., 138 Fulton st., New York
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Manasse Co, L., 88 Madison st, Chicago
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Post Co., The Fred'k, 212 S. Clark st, Chicago
Queen & Co., Inc., Philadelphia, Pa
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Stackpole & Bro., 39 Fulton st, New York
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Williams, Brown & Earle, 918 Chestnut st Phila
Weber, F., & Co., Philadelphia
Young & Sons, 43 N. 7th st, Philadelphia, Pa

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Albree, Chester B., 14 Market st, Allegheny, Pa
Belmont Iron Works, Philadelphia, Pa
Brooks & Co., T. H., Cleveland, O
Reiling, Vilsack & Co., Ltd., Pittsburg, Pa
Schreiber, L., & Sons Co., Cincinnati, O.

Iron Work (Structural).
(see Structural Steel and Iron Work.)

Jacks.
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Jails.
Reiling, Vilsack & Co., Ltd., Pittsburg, Pa

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Olsen, Tinius, & Co., Philadelphia, Pa
Pittsburg Testing Laboratory, Pittsburg, Pa
Riehle Bros. Test & Machine Co., Philadelphia, Pa

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Donaldson Iron Co., Emaus, Pa
Drummond, M. J., & Co., 192 Broadway, New York

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General Electric Co., Schenectady, N Y

Lead (Pig).
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McLean, John, 208 Monroe st, New York
Ogden, J. Edward, 147 Cedar st, New York

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Wells Light Co., 44 Washington st, New York

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Westinghouse Electric & Mfg. Co., Pittsburg

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Kelley Island Lime & Transport Co., Cleveland

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Dutton Pneumatic Lock & Eng. Co., 11 B'way, N Y

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Latrobe Steel Co., 1209 Girard Bldg., Philadelphia, Pa

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Baldwin Locomotive Works, Philadelphia, Pa
Heisler, Chas L, Erie, Pa
Pittsburg Locomotive & Car Works, Pittsburg, Pa
Porter, H. K., & Co., Pittsburg, Pa

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Byers, John F., Machine Co., Ravenna, Ohio
Males Co, Ætna Bldg, Cincinnati
Porter, H. K., & Co., Pittsburg, Pa

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General Electric Co., Schenectady, N Y
Porter, H. K., & Co., Pittsburg, Pa
Westinghouse Electric & Mfg. Co., Pittsburg

Locomotives (Mining).
Jeffrey Mfg. Co. Columbus, O
Link Belt Machinery Co., Chicago.
Porter, H. K., & Co., Pittsburg, Pa
Westinghouse Electric & Mfg. Co., Pittsburg

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Baldwin Locomotive Works, Philadelphia, Pa
Pittsburg Locomotive & Car Works, Pittsburg, Pa

Locomotives (Second hand.)
Briggs, Marvin, 12 Broadway, New York
Bailey, John D., Harlem River & Third ave, New York
Everson, B M, German Nat. Bank, Pittsburg, Pa
Fitz-Hugh & Co., Monadnock Block, Chicago
Gardner, J T, 632 Rookery bldg, Chicago
Watson, Benjamin, 66 Beaver st, N Y

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Lidgerwood Mfg. Co., 96 Liberty st, N Y
Marion Steam Shovel Co., Marion, Ohio

Lubricants.
Dixon, Jos. Crucible Co., Jersey City, N J

Lubricators.
Lunkenheimer Co., Cincinnati, Ohio

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Carbolinium-Wood Preserving Co, Nashville, Tenn
International Creosoting & Con. Co., Galveston, Tex
Norfolk Creosoting Co., Norfolk, Va
West Pascagoula (Miss.) Creosoting Works
Wyckoff Creosoting Co., Williamsport, Pa
(see also Creosoting.)

Lumber (Dock).
Jones, Benj. F., 147 E. 125th st, New York
Strock, S. C., 11 Broadway, New York

Lumber (Yellow Pine).
Vanderbilt & Hopkins, 128 Liberty st, New York

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Carlin, W. J., 380 S. Highland ave., Pittsburg, Pa
Carlin's, Thos., Sons, Allegheny, Pa
Everson, B M, German Nat. Bank, Pittsburg, Pa
Fitz-Hugh & Co., Monadnock Block, Chicago
Fitzsimmons, A. N., 1625 Monadnock Block, Chicago
Orr, John M., Second Natl. Bk. Bldg., Paterson, N J
Schults & Co., 14 So. Broad st, Philadelphia
Torbert & Peckham, 1005 Monadnock Block, Chicago

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Greger Mfg. Co., 710 Drexel Bldg., Philadelphia
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(see also Castings.)

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Lufkin Rule Co., Saginaw, Mich

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(see also Blowers.)

Mechanical Stokers (see Automatic Stokers).

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Buffalo Expanded Metal Co., Buffalo, N Y
Central Expanded Metal Co., Pittsburg, Pa
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N. Y. Expanded Metal Co., New York
Northwestern Expanded Metal Co., Chicago, Ill
Pittsburgh Expanded Metal Co., Pittsburgh
Southern Expanded Metal Co., Washington, D C
Youngstown Iron & Steel Roofing Co., Youngstown, O

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Siemens & Halske Electric Co, Chicago
Westinghouse Electric & Mfg. Co., Pittsburg

Meters (Fuel Oil).
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National Meter Co., New York

Meters (Water).
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Buffalo Meter Co., Buffalo, N Y
Hersey Mfg. Co., South Boston, Mass
National Meter Co., 118 Chambers st, New York
Neptune Meter Co., 253 Broadway, New York
Thomson Meter Co., 79 Washington st, Brooklyn, N Y
Union Water Meter Co, Worcester, Mass
Worthington, Henry R., 98 Liberty st, New York

Mill Equipments.
Bartlett C O & Co Cleveland
General Electric Co., Schenectady, N Y

Mining Machinery.
Abbe Mfg Co, Max F, 26 Cortlandt st New York
Allis, Edward P., Co., Milwaukee, Wis
American Diamond Rock Drill Co., 120 Liberty st, N Y
Bradley Pulverizer Co., 92 State st, Boston, Mass
Bucyrus Co., South Milwaukee, Wis
Fraser & Chalmers, 132 Fulton st, Chicago
Gates Iron Works, 630 Hilston ave, Chicago, Ill
General Electric Co., Schenectady, N Y
Jeffrey Mfg. Co. Columbus, O
Lidgerwood Mfg. Co., 96 Liberty st New York
Link Belt Machinery Co., Chicago.
Marion Steam Shovel Co., Marion, Ohio
Rand Drill Co., 100 Broadway, New York
Sullivan Machinery Co., 60 N. Clinton st, Chicago, Ill
Weber Gas & Gasoline Engine Co., Kansas City Mo

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Motors (Electric).
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General Electric Co. Schenectady N Y
Siemens & Halske Electric Co, Chicago
Sprague Electric Co., 24 Park N. New York
Storey Motor & Tool Co., 464 So. Broad st, Trenton, N J
Westinghouse Electric & Mfg. Co., Pittsburg

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Worthington, Henry R., 98 Liberty st, N Y
(see also Turbines.)

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Harrison Bros & Co, Inc., Philadelphia
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Patterson-Sargent Co., Cleveland, Ohio
Rinald Bros., Philadelphia Pa
Shearer-Peters Paint Co, Cincinnati
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Michigan Pipe Co., Bay City, Mich

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Vulcan Iron Works, Chicago, Ill
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Cram, R. J. & A. B., 26 W. Hancock av., Detroit
Carlin's, Thos., Sons, Allegheny, Pa
Vulcan Iron Works, Chicago, Ill

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Norfolk Creosoting Co., Norfolk, Va
Wakefield Sheet Piling Co., Rookery bldg, Chicago

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Builders Iron Foundry, Providence, R I
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Donaldson Iron Co., Emaus, Pa
Drummond, M. J., & Co., 192 Broadway, New York
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Millar, Chas., & Son, Utica, N Y
National Foundry & Pipe Works, Scottdale, Pa
Reading Foundry Co., Ltd., Reading, Pa
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Pipe (Riveted Steel).
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Gillespie, T. A., & Co., Pittsburg, Pa
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McNeil, Jas., & Bro., 26th & Railroad sts, Pittsburg, Pa
Pelton Water Wheel Co., New York & San Francisco
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Atlas Clay Material Co., Ger. Bank Bldg., Pittsburg
Blackmer & Post Pipe Co., St. Louis, Mo
Dickey, W. S. Clay Mfg. Co, Kansas City, Mo
Jackson, John H., Albany, N Y
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Monmouth Mining & Mfg. Co., Monmouth, Ill
Sharon Clay Mfg. Co., Sharon, Pa

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Michigan Pipe Co., Bay City, Mich
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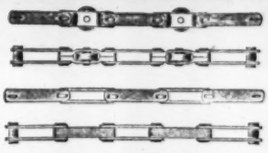

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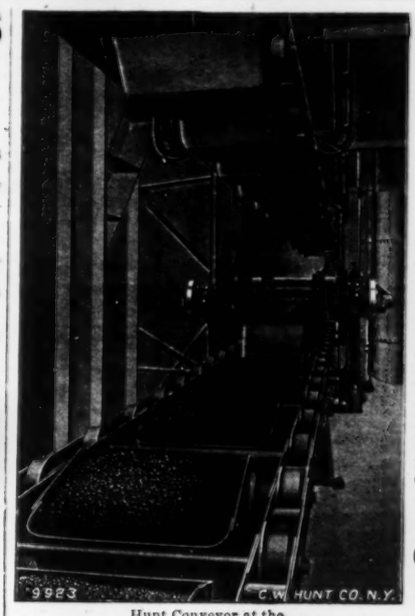

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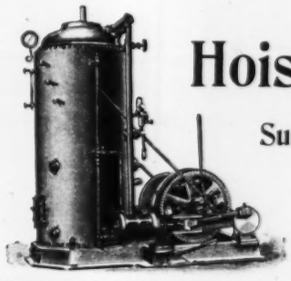

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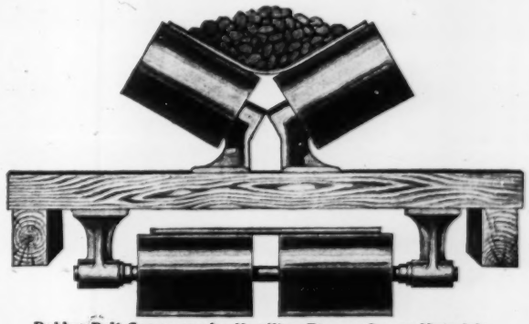

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Steam Shovels, McCaslin Overlapping Gravity Bucket Conveyor, Harrison Conveyor, Automatic Railways, Cable Railways, Cars, Switches, Track.

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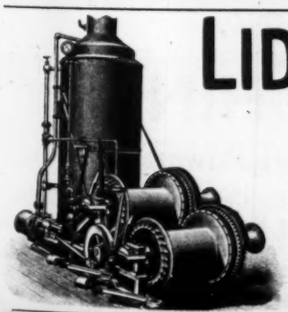

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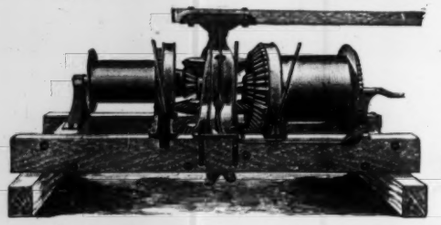

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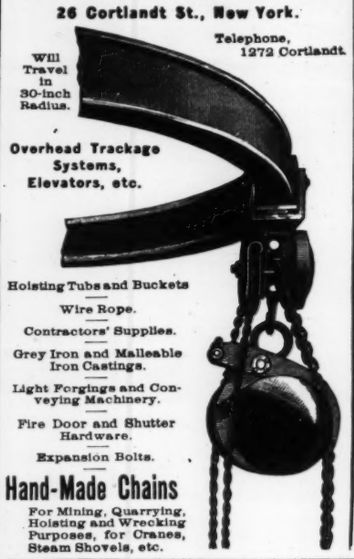

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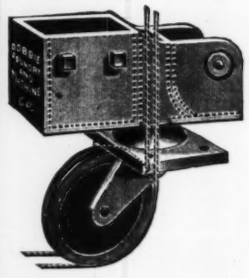

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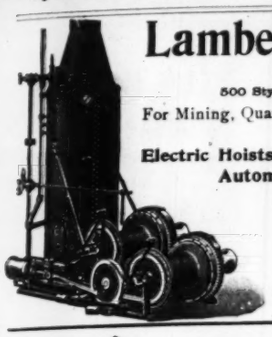

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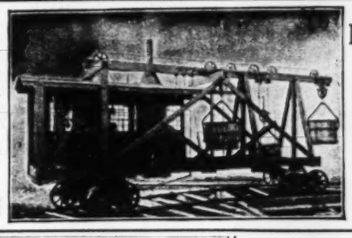

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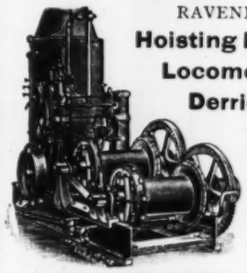

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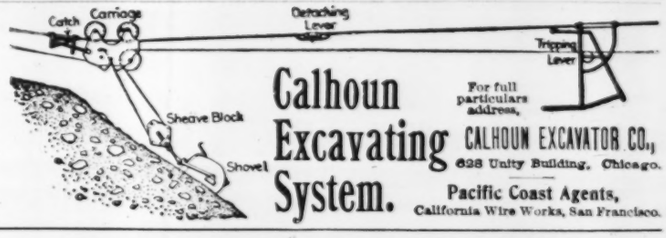

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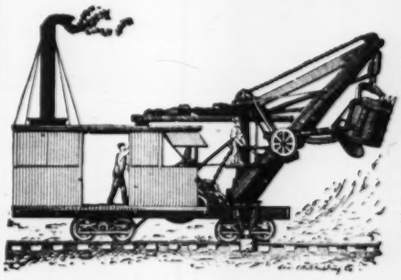

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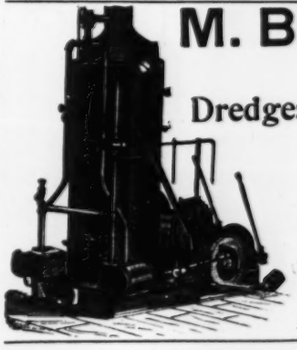

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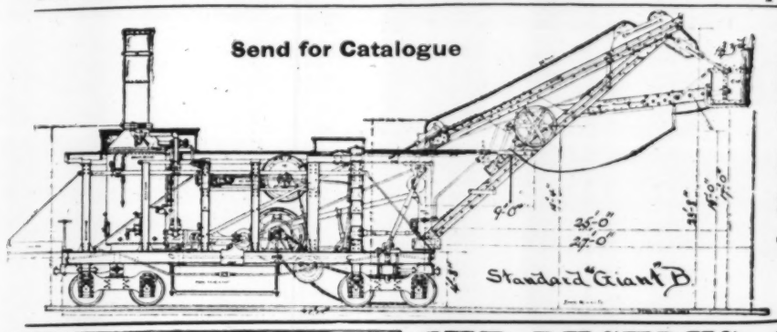

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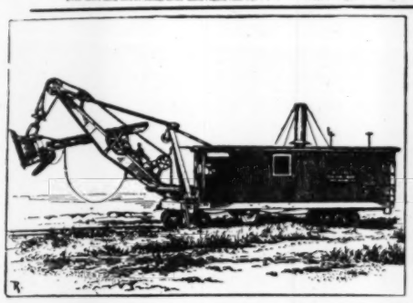

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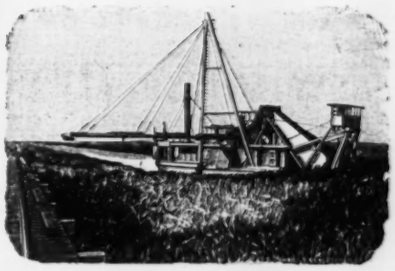

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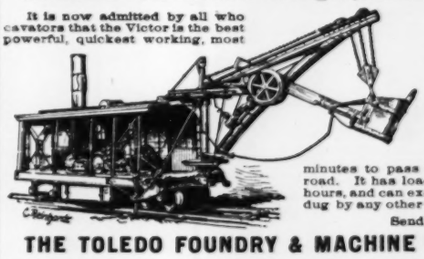

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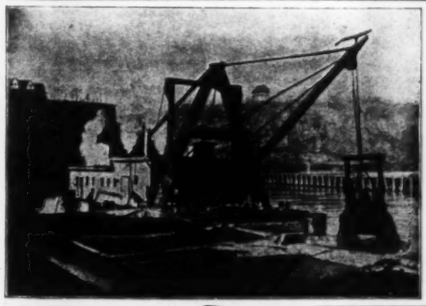

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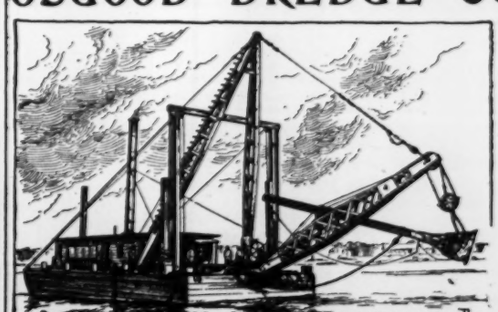

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Smidth, F. L., & Co., 64 Malden lane, New York
West Pulverizing Machine Co, 220 Broadway, N Y

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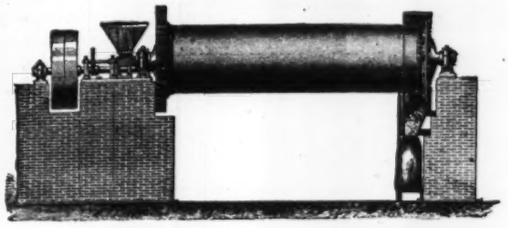

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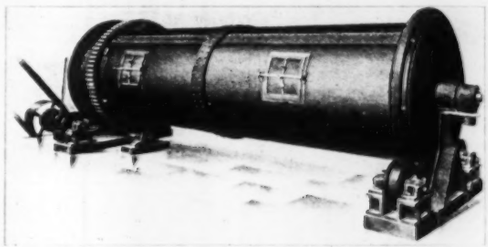

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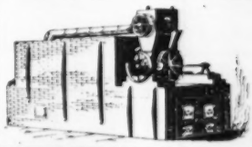

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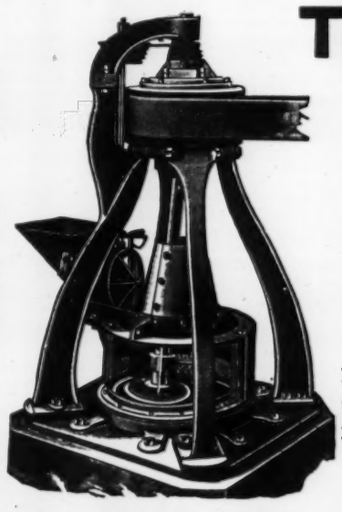

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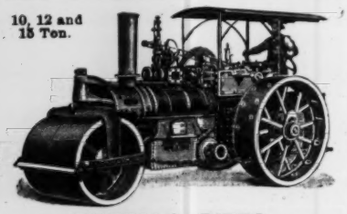
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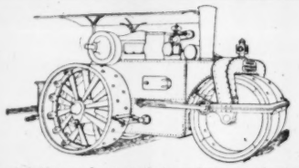
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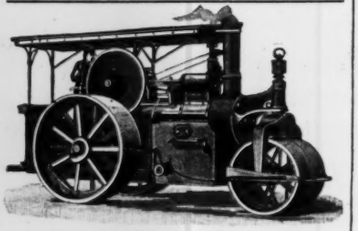
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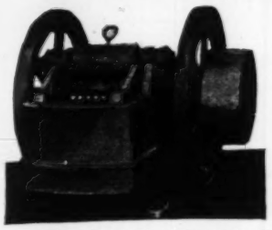

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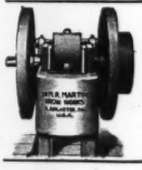

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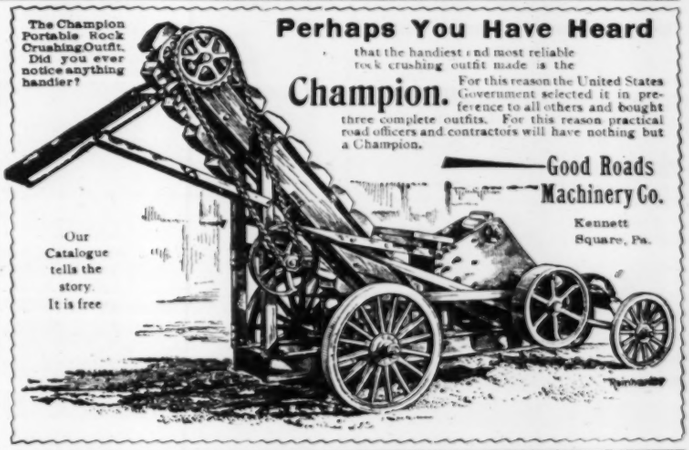

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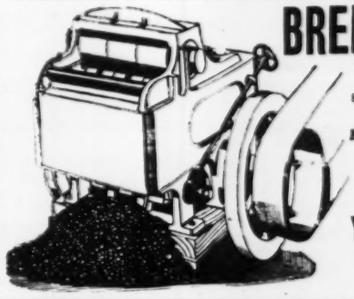

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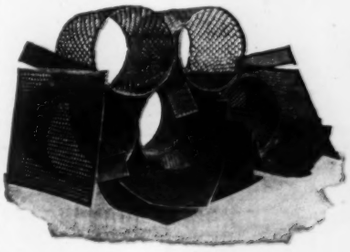

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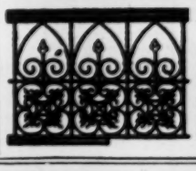

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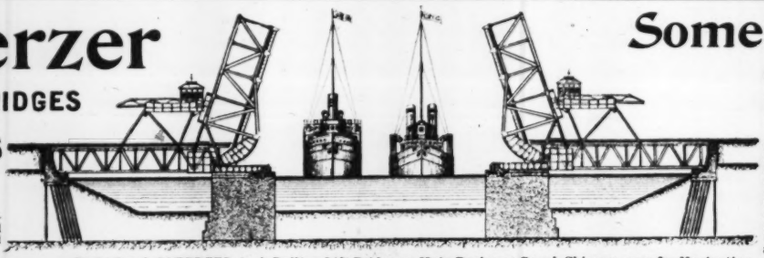

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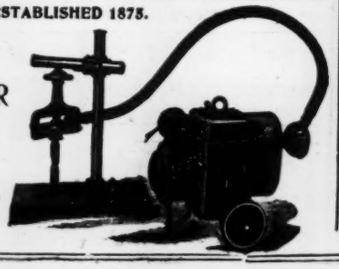

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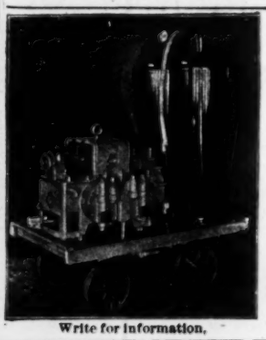

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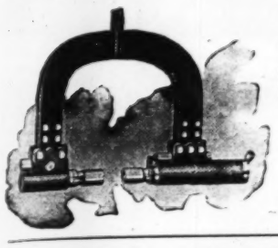

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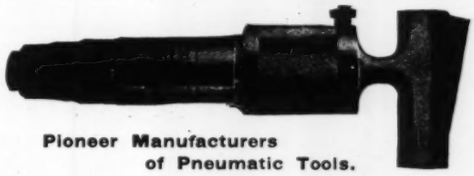

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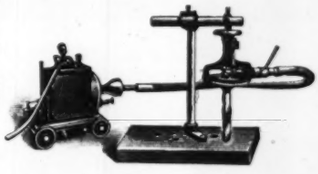

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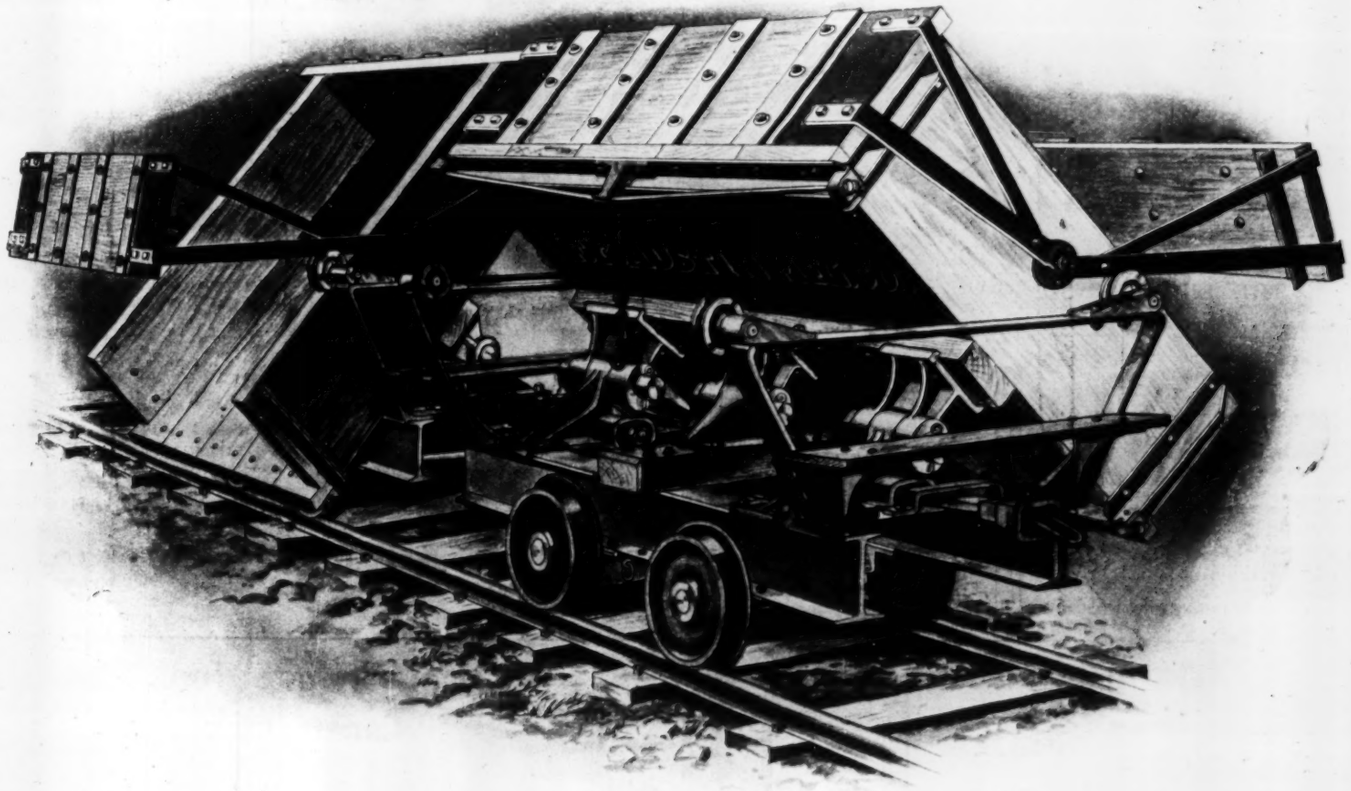

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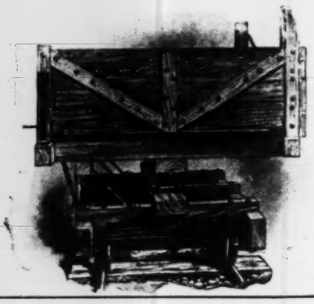

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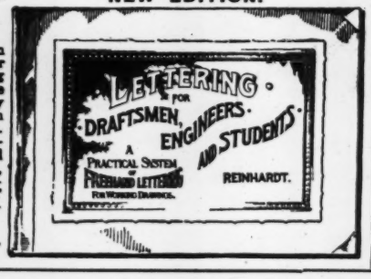

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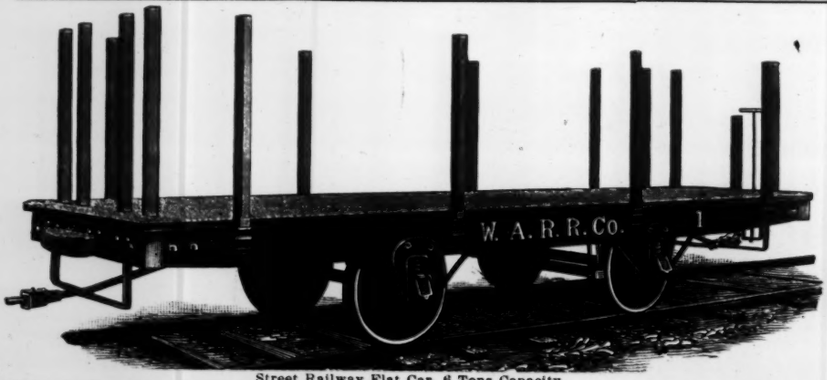

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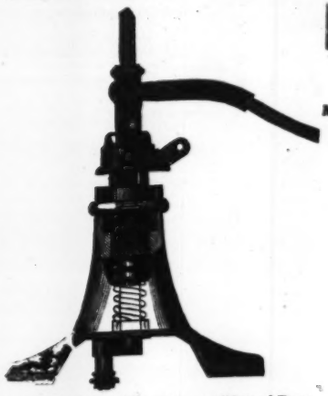

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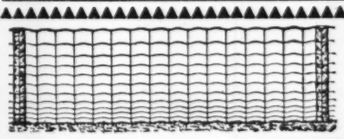

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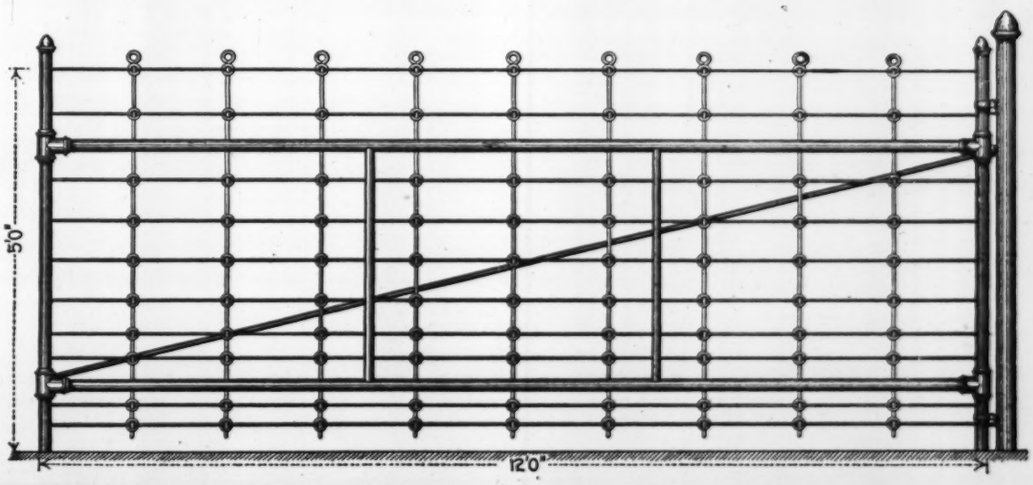

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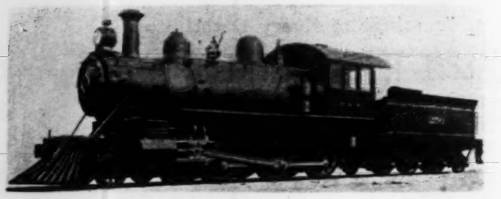

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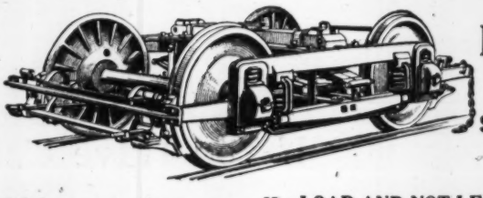

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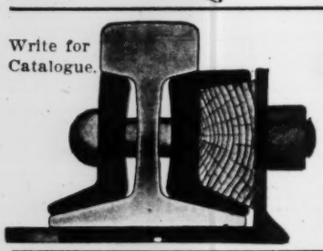

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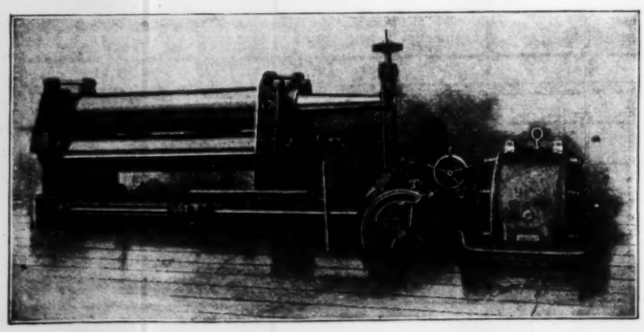

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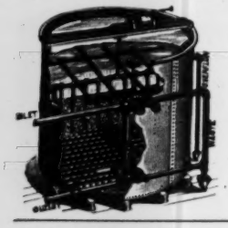

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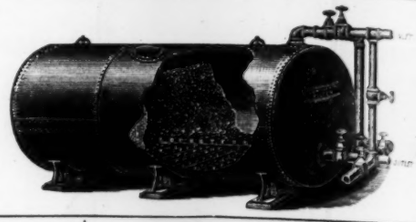

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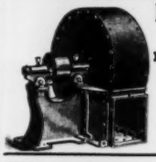

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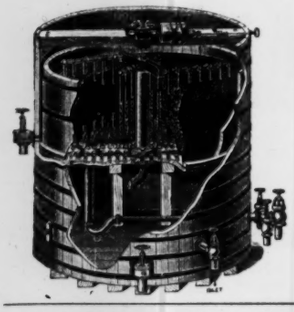

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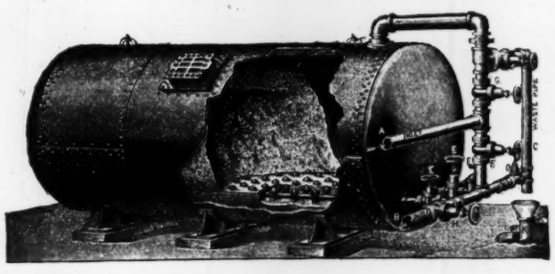

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